PACIFIC FISHERMAN

May 1961

v9(6)

TRAWLING

In New Dimensions . . . p. 5

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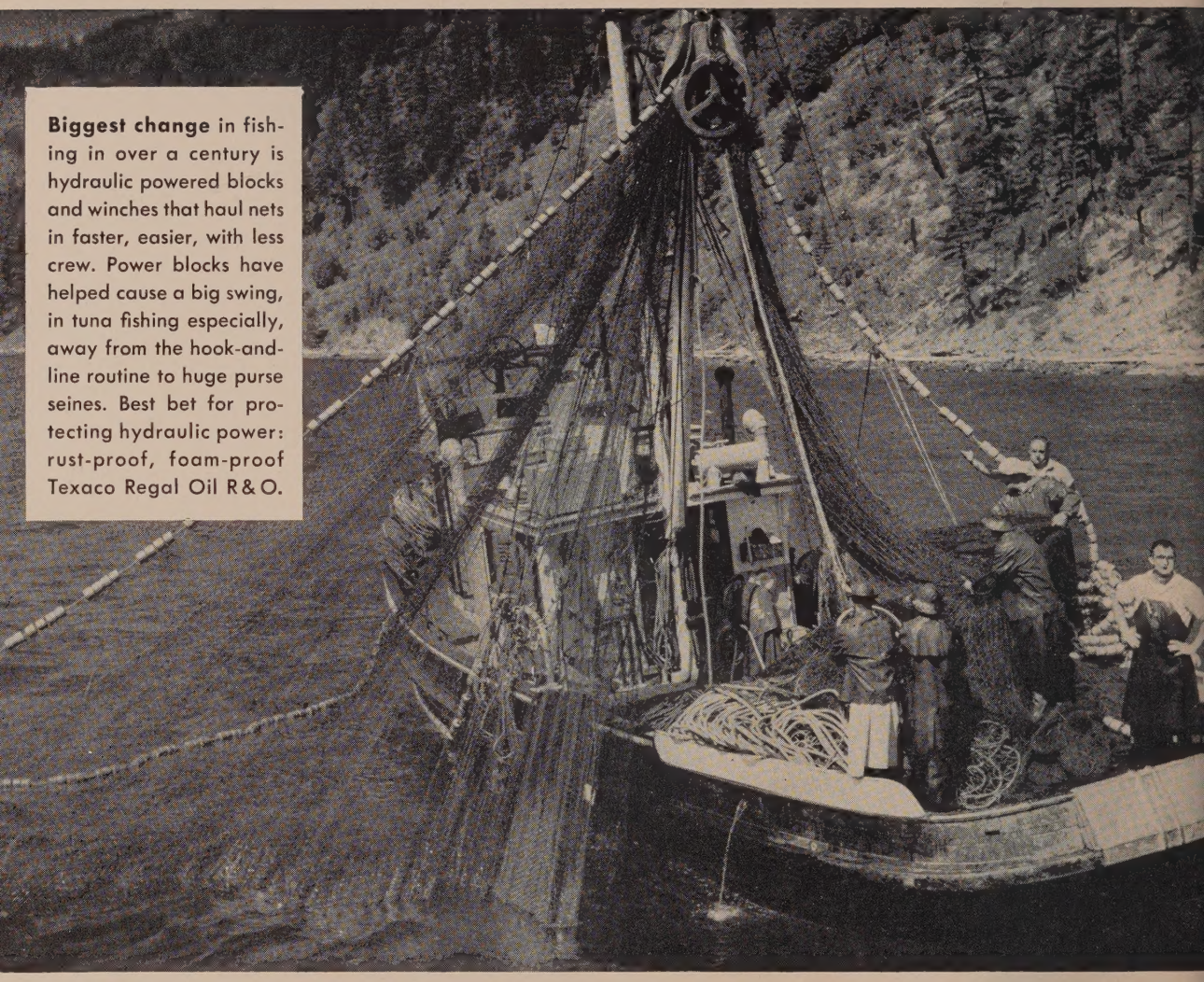
Bellingham, New Halibut Port—

Mount Baker guards Puget Sound's northernmost port. Plants on Fishermen's Harbor are Bellingham Cold Storage, left, Columbia River Packers Assn. salmon cannery; Stokeley-Van Camp between.



Biggest change in fishing in over a century is hydraulic powered blocks and winches that haul nets in faster, easier, with less crew. Power blocks have helped cause a big swing, in tuna fishing especially, away from the hook-and-line routine to huge purse seines. Best bet for protecting hydraulic power: rust-proof, foam-proof Texaco Regal Oil R&O.

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Our Fifty-Ninth Year— MAY, 1961 Vol. 59 No. 6

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Milo Moore Resigns Office As Washington Fisheries Director

● Milo Moore, one of the colorful and controversial figures in the Pacific fisheries, resigned as Washington State Director of Fisheries at the end of April.

Governor A. D. Rosellini said the resignation would be accepted, but that it might be a little time before a successor is announced.

Only about 10 days before his resignation was revealed Mr. Moore carried to Congress a personal proposal for a federal investment of $70 million over a 20-year period in a "salmon farm" program for the three Pacific Coast States; and recommended a similar program for Alaska.

Mr. Moore's tenure had been the subject of rumor and report for a number of months, but his resignation erupted with surprising suddenness immediately following his return from Washington, D.C.

● Speculation as to the identity of the next Washington Director of Fisheries revolves around several individuals.

Richard S. Croker, chief of the marine resources branch of the California Department of Fish and Game, is considered a leading possibility. He is known to have been in Seattle and Olympia for several days immediately before Mr. Moore's resignation was announced.

Alphonse Kemmerich, executive director of the Pacific Marine Fisheries Commission, is known to have indicated his interest in the position.

Richard T. Pressey, formerly a ranking biologist with the Washington department, and for six months or more with the U.S. Bureau of Commercial Fisheries, is reported under consideration.

● Mr. Moore's second term as Washington director—he had previously served four years during the Wallgren administration in 1945-49—has been marked by devotion to "fish farming" as a means of maintaining the salmon resource despite the pressures of population, pollution, predation, dams, diversions, high-seas fishing, reduced spawning area and ever-increasing fishing, sport as well as commercial.

Possibility of successful application of "fish farming" methods to salmon, with their specialized environmental requirements and high-seas period of growth, was sharply challenged by many scientists, producing a controversy which may have had some bearing on Mr. Moore's resignation.

Never one to avoid argument in fisheries management, Mr. Moore was a vigorous contender that Silver salmon should be protected by international action from fishery during their migration through the Strait of Juan de Fuca.

Mr. Moore's experience in fisheries administration has been widely varied. Between his two terms as director he served as a specialist, consultant and advisor in the development of the fisheries of Greece and Korea; and for two years he was fisheries consultant to the U.S. Senate Committee on Interstate and Foreign Commerce.

● Whoever is Washington Director of Fisheries bears challenging responsibility. He has complete and plenary authority for the management of a resource of inestimable value. He is a member of the International Pacific Salmon Commission, through which the United States and Canada build and share the salmon fisheries of their boundary waters. He speaks for the State of Washington in International North Pacific Fisheries councils.

● The job needs and deserves the best possible man.

We hope Governor Rosellini finds him.

TRILOCK

says Capt. Anton Misetich, master of the tuna seiner Paramount

"My present net is part TRILOCK and part conventional knotted nylon webbing" says Capt. Misetich, "so I've compared the two kinds. I've decided to replace my conventional webbing with TRILOCK.

"No doubt about it, TRILOCK is stronger. No matter which way the pull comes, the meshes hold better. We came through our last trip without a tear. I find TRILOCK has better dip retention too.

"THE TRILOCK net works better—no friction. It's light weight, works better in the equipment. Porpoise do not seem to get tangled up in it, but roll freely. We had less shark problem with our TRILOCK.

"The biggest cut we've made with our TRILOCK webbing was around 65 tons or more, but we could have made much bigger cuts if we had needed to, without fear of losing the fish.

"I think we'll fish faster and easier with TRILOCK. To me, that means lower costs and bigger profits. That's why I'm replacing with TRILOCK".

Year after year, Capt. Anton Misetich has been am the leading fishermen in the San Pedro tuna fl most of the time top man, bringing in more ton tuna than any other seine skipper in the fleet. He the first tuna fisherman to use a complete n seine (on his vessel the ANTHONY M.). A fisher all his life, he has successfully fished sardines mackerel as well as tuna.

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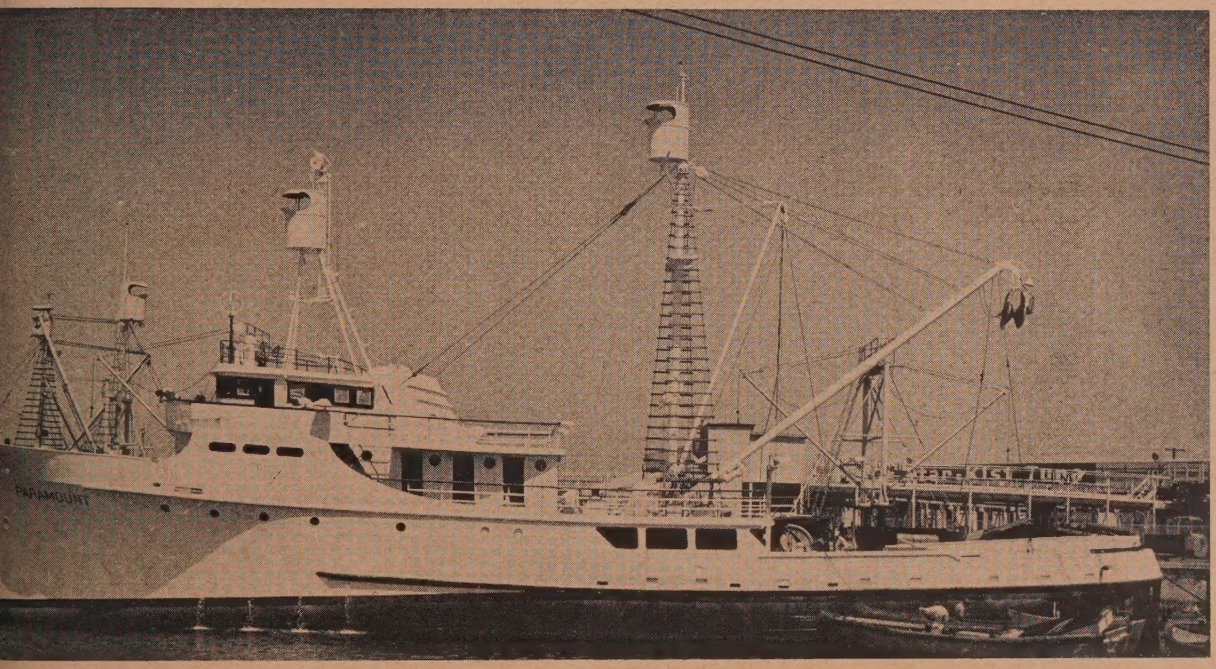

e PARAMOUNT—one of the finest fishing vessels oat. All steel, 132 ft long, capacity approximately) tons of frozen tuna. Powered by a 1200-hp 8-cyl. ercharged Superior diesel engine, she carries the st modern fishing equipment—Puretic power block, rthern dragger winch, all navigational aids. She s converted by Larson Boat Works, Terminal and, in 1959.

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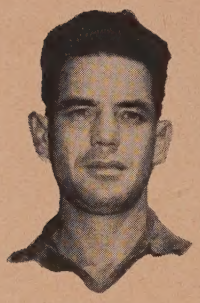
TRILOCK is a new, different type of fish netting . . . made by a special process . . . manufactured exclusively by U.S. Net & Twine Co.

TRILOCK's new type construction eliminates the chafing and weakness inherent in conventional knotted webbing. TRILOCK holds the dip longer. It is smoother, lighter weight in ratio to strength.

TRILOCK is made for all types of fisheries such as anchovies, menhaden, shrimp and salmon as well as tuna. It is made from E. I. DuPont de Nemours & Co.'s high-tenacity multi-filament all-nylon yarn.

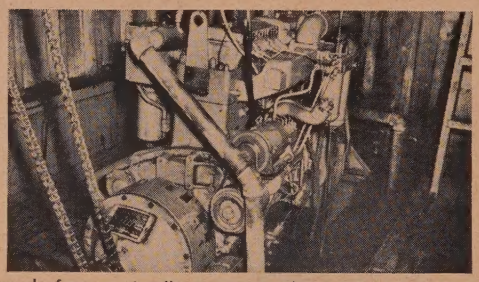
With TRILOCK you'll catch fish faster, easier, for lower operating costs and bigger profits. Get the details today! Call the factory, or the distributor nearest you. An experienced, competent expert is ready to serve you.

(TRILOCK is a registered trade mark).



Capt. Felix Alexie is a third-generation fisherman.

3½ more knots on 25 percent less fuel fo "Marie and Joan" with new 21000 diese



"I'm proud of my engine," says Capt. Alexie. "To me it's the best in the Lafitte fleet. Someone is always coming aboard to look at it, and you can believe me I like to show it off."

"Repowering the 'Marie and Joan' with Allis-Chalmers 21000 made all the differen in the world," says Capt. Felix Alexie. "I now delivering 12 to 13 knots when cruisin against 9 knots with the previous engi And we're using 5 gal. of fuel an hour whe we used 7 before.

"We try to trim our running time as clos ly as possible to give us more time for fis ing, which means a constant strain on t engine. Our 21000 furnishes more tha enough power. I haven't had a wrench on since it was installed a year ago."

Let performance and economy like th be *your* guide in selection of a diesel. S your Allis-Chalmers dealer for full inform tion. Allis-Chalmers, Milwaukee 1, Wis.

The 66-ft shrimp trawler "Marie and Joan" out Lafitte, La., is owned by Capt. Frank Zar. She ha beam of 20 ft, draws 6 ft, and turns a 44" x 3 four-blade bronze wheel through 3:1 reduction gea BM

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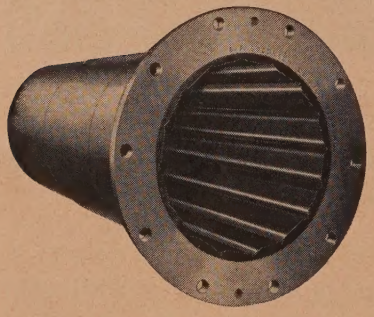

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Conversion of 150' clipper SUN EUROPA into giant new tuna seiner invo complete hull rebuild at Fellows & Stewart, and use of Goodrich Cu stern tube bearings.

CUTLESS BEARINGS IMPROVE THE PERFORMANCE OF ANY VESSEL!

If you fish for a living you know the importance of dependable propeller shaft bearings. The kind that gives years of trouble-free, QUIET operation. The kind that saves shafts and keeps boat out of drydock. That kind is CUTLESS—the soft rubber, water lubricated bearing —the bearing fishermen depend on to keep them fishing.

Buy them from your favorite Marine Supply House or Ship Repair Yard when you haul out. Large west coast stocks, popular sizes. Factory stock to 11½-inch shaft size available overnight by air.

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PROPELLER SHAFT

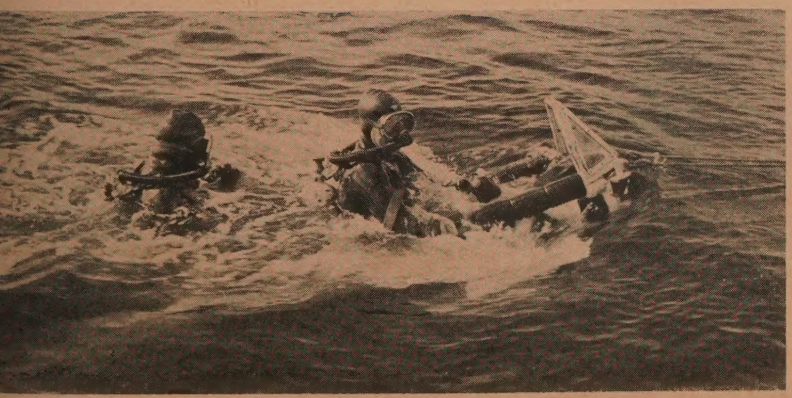
PACIFIC FISHERMAN

May, 1961

nn N. Cobb mid-water trawling in Puget Sound with the new BCF gear fishing from the surface. Distance between e two buoys is 80′, and the mouth opens to a depth of 90′.

TRAWLING—

In New Dimensions And on New Horizons

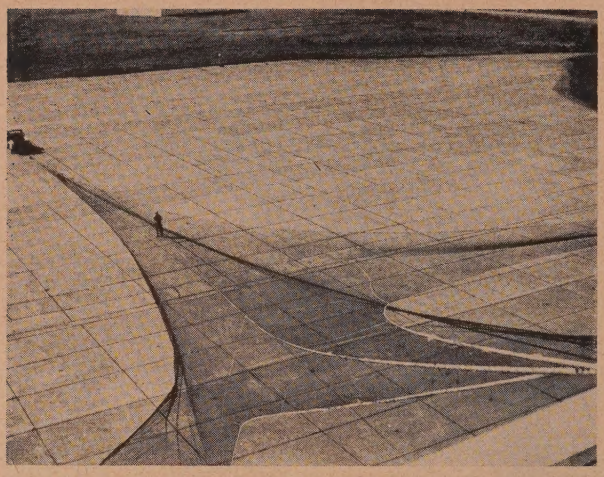


awl-Inspecting scuba divers of the US BCF riding the "sled" on which ey go down to inspect and photograph the mid-water trawl working far low the surface of Puget Sound.

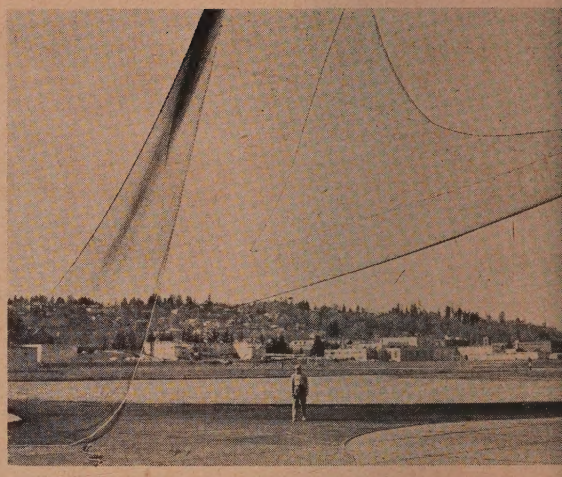
● A mouth 80′ wide, and gaping vertically 90′ can swallow a lot of fish, particularly if it can be fished at the horizon where the fish are found by the sounder.

This is trawling in new dimensions, and at horizons from the surface down. It is the mid-water trawl developed by the U. S. Bureau of Commercial Fisheries Gear Research Division at its Seattle laboratory, and is said to have a throat whose opening is four times as large as any mid-water trawl now being fished in the world.

Details of the construction, hydrofoil doors, "phantom" otter boards, adjustments and means by which the depth of fishing is controlled have not yet been disclosed.



Standing in the Mouth of the BCF mid-water trawl on a ramp of the Sand Point Naval Air Station, Seattle.



A Trawl So Big it takes an airplane hangar for a loft and a football field to stretch it out in.

● Development of the net results from months of experimentation by teams of technologists from the Seattle Laboratory unit of the USBCF Branch of Exploratory Fishing and Gear Research, of which Dayton L. Alverson is chief and Richard McNeely is gear development specialist.

The mid-water trawl has approximately 1,500,000 meshes and is built entirely of nylon web. It is 314' in length from the rope to cod end and would cost about $5,000 on a commercial basis.

Operation of the net under water has been observed under varying conditions for months by teams of scuba divers, generally working from controllable "sleds" on which they can ride down to observe the net in action under water. There they have found that the optimum towing speed is 2.9 knots, a pace at which the net assumes almost circular section, with the meshes varying from 60-degree diamonds to 90-degrees squares.

● Announcement of basic details the mid-water trawl research w made late in April, immediately lowing the return of the *John N. C* from the latest of a series of cru on which the gear was tested.

Fish taken by the net include: K and Silver salmon, smelt, anchov herring, sand rex, butter and Eng sole, flounder, lingcod, pompa capelin, dogfish, tom cod, true c hake, ratfish, shrimp, whiting rockfish.

Fish Divoteers Golf at 23rd Spring Tourne

Dauntless Fish Divoteers, 150 strong, braved the elements to play in this organization's twenty-third annual spring golf tournament at the Rainier Golf & Country Club, Seattle, April 21. Fellowship of the "nineteenth hole" and the banquet in the evening were enjoyed by 185 members and guests. Ken Williams, Marine Food Packing Co., incoming president, presided.

Other new officers at the head table were: Paul Stayle, Seattle Seafoods, vice president; Jim Stephens, Oceanic Sales Co., secretary; and Harry Backman, Sayre & Toso, Inc., treasurer.

The prize awarding period was enlivened, as usual, by the zany antics of the one and only Mike Storniola, Grace Line, Inc., as master of ceremonies. English dialect anecdotes by Fred Gosse, F. A. Gosse & Co., drew lots of laughs.

The perpetual trophy for low net in the first division went to Dale Bennett, Cello Bag Co., with low gross honors going to Don Cawley, Jr., Western Corrugated, Inc.

In the second division, J. Stan Rogers, Missouri Pacific Lines, carried off the perpetual trophy for low net, with the award for low gross going to Art Hvatum, Seattle Ship Supply Co., after a toss of the coin with Jack Miller, James Farrell & Co.

R. H. Westenberg, Green Bay & Western Railroad, won the perpetual trophy for low net in the third division. Low gross went to Bob Ladd, Pacific Marine Supply Co.

Carding identical scores, J. Stan Rogers and R. H. Westenberg were declared co-winners of the coveted "Cup of Champions," the perpetual trophy awarded at each tourney for low net in all three divisions.

In the new Callaway division, consisting of guests and members with less than three rounds of play, Ray McLane, Pacific Northern Airways, was the low net winner after a tie-breaking card draw with Phil Hanson, Jr., Perfection Smokery. The low gross award went to H. "Buzz" Hamlin, Fibreboard Pa Products Corporation.

The tournament was staged un the able leadership of Jerry But Boise Cascade Container Corporati assisted by Larry Carlander, Pu Sound Freight Lines, and Bar McCallum, McCallum Envelope

Prizes for the tournament w lined up by the Sponsors' commi headed by Elliott Benton, P. E. H ris Co., assisted by Wally Johns of the same company.

Entertainment was arranged Fred Minard, Minneapolis, No field & Southern Railroad, assis by Paul Hardy, Missouri Pac Lines, and Dick Girts, Chicago North Western Railway.

Handicapping was handled by M ris Nelson, National Canners Asso tion, assisted by Eric Bulmer, Ou kie Packing Corporation.

Publicity was the chore of I Venables, Marine Digest, and C ton Hillyard, Pacific Fisherman.

Tuna Takes Short Spring Vacation

For the first time in many, many ths, tuna fishing weakened in the r part of April—partly because of fish, partly because of the weather. n the Gulf of California, which been yielding good catches, the virtually disappeared. Tunaboat pers reported that very few fish e seen, and turned out to be less indicated when the boats caught with the schools. The weather e was good, and the fishermen e willing, but the fish decided not o-operate for a little while.

arther south, off the coasts of temala and El Salvadore, the fish or may not have been there and ng, but the weather was down- t hostile, and catches dropped off he lightest point this year.

owever, according to advice from Inter-American Tropical Tuna mission, fishing was picking up rd the end of the month in the hern waters. The reports of land- for the first week of May will ably show an improvement over thin figures being chalked up at writing. In the Gulf, however, improvement is visible at the nent.

he Terminal Island and San Diego rves presented a starved look at th's end, with most vessels at sea. trips were not unreasonably long, judged by the new standards set he seiners. Some boats had been as long as 30 or 40 days, but the est trip so far was 50 days out. ough this is not as good as 30- trips, which is what the fleet is to nowadays, it is still a good better than the 90-day and 120- trips which were not unusual for boats.

Informed people seemed to think that, in spite of the temporary shyness of the fish, the monthly picture for April would wind up close to the average, with the expected improvement in Southern fishing and the abnormally high landings earlier in the month.

● Among the shortest trip records recently made was the *Ecuador's* latest. This converted seiner, which carries a capacity of around 360 tons, left on March 25 and was back April 20. This was her fourth unloading for 1961, and her third full trip for the year. Her first delivery this year was made in January, at the end of a trip that began in 1961. Her skipper is Jean Cabral.

U. S. Bureau of Commercial Fisheries figures on tuna received by California canneries for the week ending April 15 showed a total US-caught tonnage of 2,275 (imports excluded). This was well under the 2,768 tons reported for the same period of 1960, and also substantially less than the 4,458 and 4,448 tons recorded the preceding weeks.

The year's pack of tuna to April 15 was up slightly over the corresponding figure for 1960 (3,120 cases over 3,034) but a little under the 1959 figure of 3,157.

Ecuador Joins Tuna Commission

● The Republic of Ecuador last month joined the three other powers supporting the work of the Inter-American Tropical Tuna Commission.

Over the years, the Commission has done, and is doing, work of incalculable value in studying and helping to conserve the vast international wealth represented by the stocks of Skipjack and Yellowfin that roam the Eastern Pacific. The studies of the Commission's scientists, patiently followed year after year, have uncovered and published a great deal of practical information about Skipjack and Yellowfin, their habits, their growth, and the measures that could ligically be taken to conserve the tuna populations and keep them at the point of "maximum sustainable yield"—in plain words, determining how much fish can be caught without destroying the stocks by overfishing.

The Commission has for years been maintained by Government funds contributed pro rata by Costa Rica, Panama and the United States. The addition of Ecuador to the group of collaborating nations strengthens the commission as an international working body and will no doubt improve its research work by making available to its scientists a quantity of new information and the work of Ecuador's scientists. Probably other nations will sooner or later follow Ecuador's example. The sooner they do so the more wisely the marine wealth of all nations will be managed.

Southern California Tuna Receipts

ulative through April 20 for each year, as reported by USBCF Market News Service. Data include imports as well as domestic deliveries, and are stated in tons of 2,000 lbs.

	Albacore	Bluefin	Skipjack	Yellowfin	Bonito, etc.	Total
Pedro	4,979	....	1,245	44,964	1,010	52,198
Diego	722	....	880	7,062	....	8,664
Francisco	1,183	35	....	2,048	....	3,266
1961	**6,884**	**35**	**2,125**	**54,074**	**1,010**	**64,128**
1960	9,753	196	10,285	42,022	17	62,273
1959	6,715	1,225	17,111	41,466	113	66,630

Are You Interested In Tuna Seining?

● If so, you'll want to be sure to get at least one copy—perhaps several—of the June issue of **Pacific Fisherman,** which will be devoted almost in its entirety to a comprehensive report on this revolutionary development, one of the most spectacular and significant advances ever made in world fishing.

Subscribers of course will receive their copy of this **Special Report,** but those whose subscriptions are not already in effect, and any anticipating the need for extra copies, are urged to order them in advance.

To be certain of securing copies of this significant issue, orders and remittances should be in the hands of our Circulation Department before the press run for the June issue is fixed May 25. The price per copy is 50¢.

It is suggested that such orders be placed in advance of that date with: Charles C. Baake, Circulation Manager, Pacific Fisherman, 500 Howard St., San Francisco 5, Calif.

● We cannot here describe in full the **Special Report on Tuna Seining,** but we can assure you this without question: **It will be one of the most significant and important issues Pacific Fisherman has published in its 58 years.**

N.F.I. Goes on a Diet -

Aims at 4 Fish Meal Each Week to Protec America's Good Hea

● A new role for fish in the diet and health of America became the prime objective of the National Fisheries Institute at its 16th annual convention in Washington, D. C., late in April.

In effect, the N.F.I. went on a diet. It went on a diet prescribed for the American people by one of the leading nutritional experts in the United States, Dr. Frederick J. Stare, Chairman, Department of Nutrition, Harvard University School of Medicine.

The prescription, which was written the day before his address at a meeting of the National Heart Institute Diet and Nutrition Committee, of which Dr. Stare is Chairman, was that *a proper diet designed to safeguard the average American from one of the prime causes of heart disease, calls for the inclusion of fish in the diet at least four meals per week.*

Here was a way of putting into every man's language and every man's understanding the scientist's warning about blood serum cholesterol, atherosclerosis, and other things even more difficult to understand. But Dr. Stare put the prescription into words which all could understand; and no one missed the point, from the Secretary of the Interior all the way down to the Editor of *Pacific Fisherman.*

On this basis of the special benefits of fish in the American diet, with its protective qualities based on utterly complete proteins and poly-unsaturated oils, the National Fisheries Institute based its immediate program.

Speaker after speaker—and dozens, yes, hundreds, of lobby talkers—emphasized the conviction that in science's modern findings that the poly-unsaturated oils of fish act as powerful preventives in heart disease; and that the peculiarly complete proteins inherent in fish are an invaluable asset in the sound and intelligent diet, lies the future growth and the brightest prospect for the American fishing industry.

Harvey Bundy Heads N.F.I.

● The new president of the N.F.I., Harvey H. Bundy, Jr. of Gloucester, in accepting his election keynoted his remarks by saying:

"If we can attain the four me week health goal we shall becor truth a growth industry."

This new president of the Nat Fisheries Institute, Harvey H. B Jr., is vice-president and treasur Gorton's of Gloucester. He is phew of Frederick M. Bundy, was president of National Fis Institute in 1954, who is its pr chairman of its Promotion Div and one of the stalwarts of the tute. Mr. Bundy, the new preside a statistician by education. He brother of McGeorge Bundy, s assistant to President Kennedy fo tional Security Affairs, and Wi T. Bundy, Deputy Assistant Secr of Defense for International Sec Affairs.

● If you can read any theme an dedication into the 16th N.F.I. vention it is to this goal: that *th stitute devoted itself to an effo capitalize—for the good of the A ican people as well as the good fishing industry—on the special fits of fish oils and proteins i national diet.*

Declaring that in the peculiar c ical characteristics of fish oils the ing industry has "a golden oppo ity" Dr. Stare said:

"I think fish consumption fo past 15 or 20 years has probably still but I feel definitely that it w crease during the next 10 or 20 and probably despite what you p do. But rather than saying 'd what you people do' I would that this is really an opportunit you people if you can get tog and if you can have something i way of a nationally organized pr tional campaign to sell the Ame people on what an excellent pr fish really is. If you don't do it, s thing is wrong, some place, and should have your heads examine

Which First: Legislation or Promotion?

● In this matter of emphasizin promotional and merchandisin pects of the National Fisheries

International Flavor of the Washington convention of the National Fisheries Institute is emphasized by these three presidents: **R. Clouston,** Fisheries Council of Canada, left; **Thoms D. McGinnes,** National Fisheries Institute; **Mauricio Madero,** Camera Nacional de la Industria Pesquera, Mexico.

e's program lies another aspect of 16th Convention; and here it bemes necessary to speak (write) tly:

It became common knowledge at e Convention that a cleavage had veloped within the directorate, with ong pressure exerted by a powerful oup toward a re-evaluation of the stitute's overall program with the mination of much of its legislative d lobbying functions and a stepping of its efforts directed at the proion and merchandising of sea food oducts.

The directors are known to have d the benefit of analytic studies by o national management consultant ms in general supporting the thesis a reorganization of the Institute ng lines which would in a measure luce the emphasis placed on legisla- e matters and increase that designed further the use and appreciation of food as a peculiarly valuable elent in the national diet.

The cleavage healed itself, but only er tacit agreement had been reached t the Institute would move toward realignment of its objectives over eriod of perhaps the next two years.

Supporting Mr. Bundy as national fers for the next year are Theodore epard of New Orleans as national cretary and Louis Vitale, president the Los Angeles Smoking & Curing mpany as national treasurer.

Elected vice-president for Region 4, Pacific Southwest, was Lloyd rnacliff of the Meredith Fish Comny of Sacramento, California, to- her with the following directors; ward E. Schultz of Amende & hultz, Los Angeles; R. T. Barnes of Standard Fisheries Corporation, n Francisco; S. J. DeLuca of the te Fish Company, San Pedro; W. Dooms of William O. Dooms Comny, Oakland, California.

The Pacific Northwest Region 5 is aded by R. A. Littlefield, Seattle afoods, Inc., Seattle; with the folving directors: Norman E. Weitmp, Washington Fish & Oyster mpany, Seattle; James Pinkerton, tchikan Cold Storage Company; eyer Bornstein, Bornstein Seafoods, ., Bellingham; Palmer G. Olson, w England Fish Company, Seattle.

The National Fisheries Institute ll hold its annual Convention in Sele in 1964. The following year, 65, it will meet in Houston, Texas. Next year, 1962, the meeting will in New Orleans and in 1963 in iladelphia.

vo Presidential Programs

Two presidents of N.F.I., Thomas McGinnes for 1960-61; and Har- y H. Bundy, Jr. for 1961-62, each

Harvey H. Bundy Jr., elected president of the National Fisheries Institute for 1961-62 term. His youth bespeaks the youthfulness of New Frontier Days in Washington.

laid a definite and specific program before the Institute. Mr. McGinnes' had three points and Mr. Bundy's four. The three points of the current president's program are:

1. Support by the N.F.I. for pollution prevention and control;

2. The Institute's wholehearted support for President Kennedy's marine research program;

3. Active participation in and support of the Food & Agricultural Organization's nutritional conference of 80 nations due to convene in Washington in September 1961.

The four points in the program of President-Elect Bundy were these:

1. Seek to increase by every legitimate means the per capita consumption of fish in the United States;

2. Improve the quality of the fish we offer the American people;

3. Improve the practices in distribution and handling of that fish from the producer to the ultimate consumer;

4. Maintain industry-wide cooperation to the assistance and economic support of the industry as a whole.

N.F.I. Positions and Resolutions

● Formal resolutions and legislative positions of the National Fisheries Institute at its 1961 Convention were somewhat less formidable and controversial than usual. Among the actions taken were:

1. For the umpteenth time passed a resolution reaffirming its support of the exemption from ICC regulation of motor vehicles transporting fresh and frozen fishery products in interstate and foreign commerce.

2. Requested that Congress provide adequate funds for the Gloucester laboratory of the Bureau of Commercial Fisheries to undertake and pursue comprehensive time-temperature tolerance studies on frozen fish and shellfish during the immediate future months.

3. Requested that the Fish & Wildlife Service consider the feasibility of going beyond the exploration for new fishery resources and seek ways to solve technological and practical problems involved as an aid to industry.

4. Objected to the practice of state governments seeking to impose state franchise income taxes on fishing and other industries which are located in one state and sell their products in other states.

5. Objected to present food stamp plans now before Congress unless fish is specifically included under them.

6. Granted support to the proposed Gruening Amendment to the Salton-

Fish 'n' Seafood Promotion was central in the thinking at the NFI convention in Washington, as evident in this view of the Promotion Division, being addressed by Arthur H. Frohman, its financial chairman.

Louis Vitale, president of the Los Angeles Smoking & Curing Co., elected national treasurer of N.F.I.

stall-Kennedy Bill which would increase its share of the duties collected from fishery imports to 60%, from 30%, with the additional 30% earmarked for distribution on a pro-rata basis to the states. The Institute made it plain that it had no objection if only the extra 30% went to the states and the original amount was not expended for purposes other than those specified in the original bill.

7. Opposed the Bartlett Amendment to the Labor Relations Act which would make crewmen on fishing vessels employees of the vessel owner.

8. Opposed the construction of the Nez Perce Dam on the Snake River and any other dam which would ineffectuate the proposals to make the Salmon River in Idaho a salmon sanctuary.

9. Approved the Magnuson Bill which would restore to the owner-operator of fishing vessels the rights and privileges of the marine hospital service.

● 10. By a masterful exhibition of footwork the N.F.I. preserved the integrity of its policy not to participate in controversies regarding imports and tariffs, but obviously referred to the recent freeing of crab imports from Soviet Russia in its resolution which said in full, and in a marvelous example of circumlocution:

"Whereas, action taken recently, and in the past, by the executive branch of the federal government which has been injurious to segments of the fishing industry of the United States; and whereas, such action has been taken without consulting the fishing industry and its representatives in Congress; now, therefore, be it resolved, that the National Fisheries Institute, on behalf of the fishing industry of the United States, register protest against such action by the federal government and request that in the future an opportunity for a hearing be provided before action is taken.

● Under the leadership of President Thomas D. McGinnes, the N.F.I. Convention in Washington this year was marked by two notable omissions and one change in convention program character.

Most significantly, the exhibits which have been a feature of the Conventions for a number of years were discontinued at the Washington meeting.

As a result, the attendance of suppliers to the fishing industry was markedly reduced from that of previous years and the attendance at the business sessions of the Convention unquestionably stepped up rather sharply.

Another long-standing feature, the "Old Timers Club" was discontinued as a club, although nominally maintained as a general social center.

Following the demand of many members for a shorter period devoted to the business of the Convention, this year it was compressed into 2½ days, not including an intervening Sunday. In previous years directors and other officials of the Institute if they faithfully attended the various committee meetings were required to spend almost a week away from their businesses. At the Washington Convention many of the meetings which in former years had been held in advance of the Convention itself were telescoped in a tight and active schedule.

Charles E. Jackson, general manager of the National Fisheries Institute since its inception in 1946, who told the directors at Washington that he wished to retire within two years.

Membership opinion appeared approve warmly of all three of th innovations.

The N.F.I. Convention in Washi ton this spring was the most larg attended in the past five years. W one day of the Convention yet to r the registration numbered 749. tendance at the congressional rec tion and dinner the previous even was 722.

Old hands on the Washington sc were astonished at the number rank of the officials in attendance the congressional reception. By act count, there were 22 senators and congressmen among the guests. So old timers who have spent much o lifetime attending Washington fu tions of this sort could not remem a previous occasion when as many 55 senators honored a trade asso tion party with their presence.

Loring Daly, Bristol Bay Superintendent, Dies

Frederick Loring Daly, third g eration Bristol Bay salmon cann superintendent, died in Seattle late April at the age of 41.

At the time of his death he superintendent of the Pederson Pe cannery of the New England Fish

His health had not been good a number of years, but he had b able to continue his work until was taken critically ill early spring.

Mr. Daly is believed to be only man to succeed his father his grandfather as Bristol Bay c nery superintendent.

As an infant of five weeks he taken to Alaska for the first time his father, Frederick Loring Daly, nior, who himself was the son o canneryman, F. A. Daly, an early-d Bristol Bay superintendent with Alaska-Portland Packers Associati

His brother, Jack Daly, also c tinued in the salmon business and advertising manager of the Colum River Packers Association at Asto Ore.

Correction of 2 Slips In PF March Issue

In the March issue of *Pacific F erman,* the name of Mr. Enrique Pe of the Momoi Co., Long Beach, given as Lopez. This is in error. gentleman's correct name is Perez.

In the caption under Mr. Per name, the name Momoi was spelled "Moimoi."

lew Frontiers" of sheries Technology ight with Promise

'New Frontiers" pop up as catch rds in the remarks of folks com- out of Washington these days. ere's Harold Allen, for example. s assistant chief of the Technology nch of the Bureau of Commercial heries, and he came to the recent zen Fish Cutting in Seattle ready make some remarks as a frontiers- n.

Then the National Fisheries Insti- e convention programmers, who and think in Washington, have anged to devote one of the feature sions of the convention opening in shington April 14 to the subject: ew Frontiers in Food Service."

Only the fish haven't been using catch words; but even their fron- s are threatened by the National rine Sciences bill with its funds intensified oceanography and ma- e biology.

Seriously, Mr. Allen, scanning the ew Frontiers" of fisheries, dis- rned:

1. Need for new and modernly de- ned and equipped fishing vessels.

2. Radiation pasteurization as a ghly promising means of extending e keeping qualities of fish and their shness far beyond present limits; d the use of radiation for this pur- se rather than to effect actual ster- zation. Fish are the food products hich appear nearest to the goal of diation utilization for this purpose, d experimental work is to be under- ken in this field at the Seattle BCF oratory this year.

3. Protein concentrates from spe- es and portions not now utilized fer a challenge to the development new techniques, and promise of eatly increased economic return om the raw material now available t largely unutilized.

4. Manufacture of pharmaceuticals d low cholesterol diet materials om fish wastes or unused species rries large potential for profit ex- nsion.

5. "Frozen drying" is already here n some marine products, and brings potential of extraordinary promise.

6. FAO international conference on ish in Nutrition, to be held in Wash- gton, D. C., Sept. 19-27, 1961, of- rs a rich opportunity for develop- ent of new concepts for the use of sh and increased economic recovery om the resource.

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Wakefield's Trawlers Pioneered Application of Loran and Radar To Fishing the American Arct

● Probably the first commercial fishing operation on the West Coast to use both loran and radar was the King crab catching-processing vessel *Deep Sea* which pioneered for Wakefield Fisheries in the Bering Sea. This was early in 1947 on *Deep Sea's* first voyage in this venture.

Why did they try this equipment at a time when it was still expensive and commercially untried? Capt. Ralph Jones explains:

"When we went fishing on the Bering Sea in the maiden voyage in the spring of 1947 we were faced with an entirely new navigation problem. Out of sight of land, we were fishing on a level sea floor where you can go 50 miles without a fathom of depth change. Continuous profiles made by depth recorder, already in use by many Pacific fishermen, were therefore useless as a means of positioning in this case. Long periods of overcast and fog made celestial navigation very undependable.

Capt. Jones points out that most fishing on the Pacific Coast, except for tuna and King crab, is done very close to shore or in areas where the bottom changes abruptly. Early Wakefield prospect trips by smaller chartered vessels in the Bering Sea demonstrated the commercial quantities of King crabs, but they also convinced Lowell Wakefield, company president, that customary land sights, celestial fixes, and bottom profiles wouldn't work and their only recourse was loran.

Deep Sea was thus equipped with a Sperry loran instrument before she first departed in the spring of 1947. Capt. Jones started with the company on that maiden voyage (he became skipper in 1951) and he recalls some of the early difficulties. Shortly after the operation started, Alaska loran stations were changed in such a way that they had only one loran line to use, making it impossible to get an accurate fix by loran alone. He remembers that on his first season in Bering Sea he took as many star-sights and sun-sights as the average naval officer takes in a lifetime!

● In those days modern radar was extremely expensive, but they began to consider this equipment. In 1950 they installed a Sperry Mark II radar, and along with it developed their own angular reflector buoy system for fishing.

It consisted of a 50-gallon drum enclosed in a framework of four long planks, fastened longitudinally so as to extend several feet from each end. A weight at one end held the structure floating vertically, with the drum standing 2/3 down in the water and connected to an anchor line. At the other end of the planks an angular reflector, built stoutly of heavy stainless steel mesh, was designed to reflect in various angles and planes—a true reflector buoy even when bobbing in heavy wave action. Jones recalls that the reflection was so good that at six miles distance it showed up just like a Liberty ship on the radar screen!

They now had reliable pin-point fixes even at 10 miles away. *Deep Sea* was still functioning as a catcher as well as processor at this time, and she carried three of these buoys. The system gave them both direction and range even with one buoy afloat. They would find a hot spot most productive of crab, drop the buoy, and work the area from there, without having to worry about wind and drift taking them some distance from the spot. If fishing continued good to considerable distance from the buoy, a second buoy was set at the limit of radar range and they worked from it and sometimes a third buoy. By the time the area was covered and the buoys were picked up, *Deep Sea* was ready to scout for another hot spot. Absolute location relative to celestial or loran fix was not so important—only location relative to good fishing.

This method resulted in a great increase in production, and is now the method used in other types of bottom fishing elsewhere. Currently, Capt. Jones reports, all vessels of any size operating for Wakefield carry radar and lightweight reflector buoys to operate in the same fashion. The buoys are of course somewhat smaller because of shorter radar range on smaller vessels, but the method is essentially the same.

● In 1953 Wakefield converted
seiners *Shelikof* and *Foremost* to
fishing and processing, and shortly
ter installed radar aboard these bo
Then when the schooner *Leroy*
under charter they equipped it
radar. In 1956 *Jeannette F.* was
verted to King crab fishing and ra
was installed there also. At pre
even the larger independent boats
ing King crab for Wakefield use
same method of reflector buoys
maintain fishing position even in s
tered bays such as Pavlof and Ali

While radar's purely navigati
use might be considered secondar
In emphasizing this point, Jue
Dethloff of Germany, speaking be
this case, Ralph Jones hastens to p
out that it is impossible to calcu
from Alaska, maneuvering in the
the value of radar in running to
cinity of the mothership, or any o
moves from place to place where w
could be halted in fog, snowfall
other poor visibility. Its worth a
personal safety factor is also incal
able, and when freezership locatio
close to shore, as is so often the c
radar is an immediate check aga
anchor-dragging.

Capt. Jones reports that some in
tigation has been made of the m
of fish-finder sounders as another e
tronic aid in King crab fishing,
without fortune, probably due to
crabs' nearness to the sea floor it

He generalizes on the importa
of electronics and fishing in gene
however, pointing out that all the
ductive volume of various fish in
sea is concentrated in spots fro
few miles to a few yards in diam
and separated by wide barren spa
The problem of the individual fis
man is to learn the use of equipm
that will bring him to those small s
and help him work efficiently wi
them. The problem of fishermen
general, he adds, is the lack of su
cient oceanographic knowledge of
causes and nature of that concen
tion of fish in small isolated ar
As he sees it, this is not a questio
equipment alone, but of the knowle
to be gained from its past, present
future use.

What Will Come from Bristol Bay pawning of 1960? Good? Or Bad?

e-Aligned Research is Asking New Questions

Salmon research in Alaska takes on v character this season, and adds new objective — specific assessnt of the enormous spawning on Kvichak in 1960.

Did it constitute over-spawning? at will be the result in 1964? In 55? What is the survival from the 50 seeding? How many fry emerge spring? How healthy are they? w well are they surviving?

These are some of the questions ich scientists of the Alaska Departnt of Fisheries and the Fisheries search Institute; and for which they l be seeking answers in the Bristol y area next summer.

In the coming season the ADF scific staff takes over the statistical l enumeration work of Alaska bigical research. This includes all of counting towers which have provso effective in saving money and providing accurate counts of esement since the method was ded by the FRI some years ago.

The FRI on its part will seek basic wers to Red salmon problems. Dr. L. Burgner, assistant director, told Salmon Research Conference at ttle March 14 that the primary obtive of the institute this season is to ermine if the 1960 escapement was essive, and the index number of its spring, their size and character.

Orra B. Kerns, FRI Kvichak projleader, pointed out that knowledge the survival of progeny from the 50 spawning, and the index of its cess through the rearing period are al to Man's knowledge of just what stitutes optimum escapement.

He disclosed that a major part of enormous escapement to Lake Ilina in 1960 spawned in deep water the lake itself, with scuba divers ually observing Reds spawning at ths beyond 75'.

Increasing accuracy of FRI forets of the Bristol Bay salmon runs, minating in the spectacular success the 1960 prediction, have been ed upon:

1. Knowledge of escapement, gained ough the accurate and effective nts from enumeration towers.

2. Index of the number of fry reting from the spawning, and data as to their size and vigor, all gained from sampling by means of tow nets fished in the lakes.

3. Index of the seaward migrants, classified by size as to year of spawning, and determined by the numbers passing through fike nets fished at specific stations from year to year, and with the numbers of fry now counted by photo-electric means without injury, handling or entrapment.

4. Index of abundance of salmon on the high seas as result of seine and gillnet fishing in the feeding areas, showing the numbers of immature fish in the catch a year ahead of spawning maturity; and also the numbers of mature Reds at the time of departure from the feeding areas for the spawning migration about a month ahead of their appearance in the commercial fishery.

● Research on Pink and Chum salmon along lines somewhat similar to the Reds will be pressed this year with Dr. Donald E. Bevan placed in charge of this aspect of the FRI studies.

He pointed out to industry at the research conference that determination of the fry production and downstream migrant index for Pinks and Chums was extremely difficult, but that it now appeared a fry index could be developed on the basis of electronic counting.

He believes that knowledge of stream conditions in the case of Pink and Chum areas is quite good.

Information on the abundance of Pink and Chum salmon in the sea is one of the main objectives of the emergency research program for which the American Section of the International North Pacific Fisheries Commission is seeking $3.3 from Congress this spring.

FAWS to be "Taut Ship"

● The administration of the United States Fish & Wildlife Service appears to be planning a "taut ship" policy for the Service. This philosophy flows down from the top, from Secretary of the Interior Stewart L. Udall and definitely includes Assistant Secretary for Fish & Wildlife Frank Briggs. He told the National Fisheries Institute in his formal address to them that he expected to participate actively in the international commissions.

He told callers that he personally and Clarence L. Pautzke, Commissioner of the Service with immediately executive powers over both the Bureau of Commercial Fisheries and the Bureau of Sportfisheries and Wildlife, that he and Mr. Pautzke would share direct administrative authority over both Bureaus and that the days of two independent agencies within the Service going their own ways were finished.

In short, the impression in Washington today is that authority in fisheries will flow directly through Mr. Briggs and Mr. Pautzke, working as a team, to Donald L. McKernan, Director of the Bureau of Commercial Fisheries, as a management authority for the Commercial Fisheries and its related agencies in all the areas of science, technology, statistics, market development, and the related minor branches.

Mr. Briggs gives the impression of being a severe taskmaster. He is a conservationist of the Southern Middle West persuasion, admitting to small knowledge of fisheries but claiming a lifetime's devotion to the principle of conservation as wise use; conservation as the fullest economic utilization of the resources, whether it be in the area of recreation or in that of commercial and economic development.

He is a former senator, a Missourian, a publisher of small newspapers, but by avocation and his own testimony, *he is a conservationist.*

In him the fishing industry and the Bureau of Commercial Fisheries which serves it can expect to find a stern, perhaps critical, thoroughly fair, and wholly conscientious taskmaster.

Of this you may be sure: he is no Frank T. Bell.

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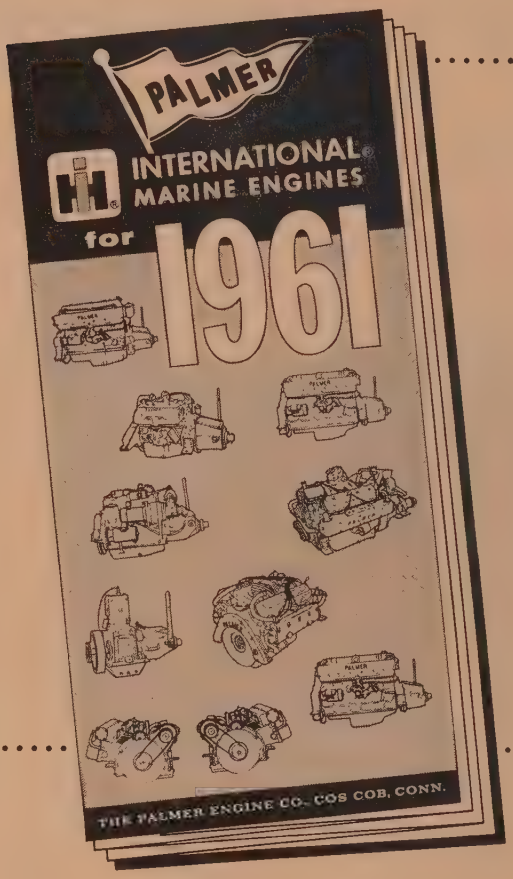

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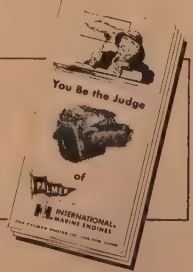

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PACIFIC Fisherman's NEWS

MAY 1961

Resident Set Net Suit May Produce "Side Effects"

● Legality of Alaska Fish and Game Board regulations requiring that only Alaska residents could be licensed to fish set nets in the Kodiak district was brought under attack in April by four fishermen, residents of Washington state.

They are: Mondar Olsen, Aksel Kielhaber, Ray Arnold and Clarence Peterson. They were promptly given a temporary injunction by the Juneau superior court.

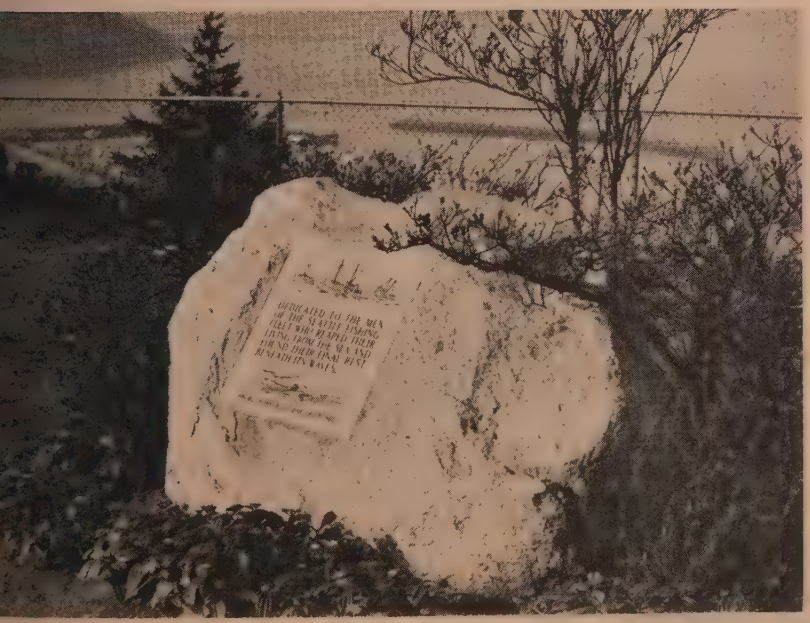
The regulation making residence a requirement for set net license in the Kodiak district is a new one this year.

Attack upon it in the courts may possibly prove far-reaching in its effects. For example:

1. Legal ruling that the Board could not impose a residence requirement in the Kodiak area probably would be equally applicable to Bristol Bay, where such a requirement has long been in effect, but where the matter appears never to have been challenged as to its legality.

2. Might possibly bring legality of set nets into question under the Alaska laws relative to fixed gear.

And There are Those Who Die —



"Dedicated to the men of the Seattle fishing fleet who reaped their living from the sea and found their final rest beneath its waves", so says the tablet on this granite monument placed above Puget Sound by the Halibut Fishermen's Wives Association. It overlooks the Shilshole whose entrance is seen just above the tablet. Dimly, in the upper distance, West Point, and at the extreme left the entrance to Lake Washington Canal.

Japan Frozen Halibut Sold in Seattle

● Japanese frozen halibut steaks in the amount of 11,000 lbs., were imported by a Seattle trader early in March and offered to buyers in the Pacific states.

Similarly, a shipment was also reported as arriving in Boston.

Quality of the goods was reported excellent by those who inspected it.

No statement was made by the Japanese shippers or the importer as to the origin of the halibut from which the steaks were cut.

So far as has been reported, this is the first Japanese frozen halibut which has been offered in the United States this year. The quantity is comparatively small, much less than the shipments of whole frozen halibut in some recent years.

Puget Tendermen Hearing Cancellations Removed

Threat of possible interruption of Puget Sound salmon operations during the 1961 season was removed about the middle of April when the National Labor Relations Board canceled the hearing sought by the Alaska Fishermen's Union in its effort to become collective bargaining agent for Puget Sound salmon cannery tendermen. These employes of 11 cannery firms number about 110 and are now represented by Local 3 of the Fishermen and Allied Workers Union, ILWU.

Cancellation was ordered on the grounds that the Alaska Fishermen's Union had not secured signatures of 30% of the men involved to support its application.

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Bering Sea Yields Heavy Halibut Fishing; Prices Run 5c Over '60 Opening

● The halibut fleet found good fishing in the cold, gray waters of Bering Sea when the far Westward season opened in April—

And as this was written approximately 30 vessels were hammering home with fish. Their deckloads were discharged at Sand Point perhaps, but bringing bumper fares back to the mainland markets.

Hailings of 60,000 lbs. were commonplace; and several vessels radioed on ahead that their loads would weigh-out at 110,000 or 115,000 lbs.

First trip on the Seattle market was landed, appropriately enough, by Capt. Ole Birkvold, president of the Fishing Vessel Owners Association. His *Constitution* carried a nice fare of 65,000 lbs., in an attractive assortment of sizes, mediums and large.

The price, 27.1¢ for large and 25¢ for mediums, was 5¢ per lb. above the opening figures in 1961. *Constitution* sold to Whiz-Eardley Fisheries.

Following sales slipped a bit, but generally on the basis of selection. The trade was interested in large fish, which would cut nicely into fletches and portions.

With the market bare of halibut, impact of the heavy deliveries anticipated in May was expected to be absorbed by the pent-up demand.

First vessels returning from Bering Seat reported that they had seen nothing of the Soviet fleet on the halibut grounds, although it was obvious that they were in the general vicinity as the air carried constant conversations in the Russian language.

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pril Brings Sharp p-Swing In Calif. ackerel Landings

The first two weeks of April owed a marked improvement in e Southern California catch of ckerel.

During those two weeks the San dro-Long Beach fleet brought in nost as much mackerel as had en landed during March and Feb- ary put together. Total landings, cluding Pacific mackerel, Jack ckerel and anchovies, were 2,369 s for the April 1-15 period, which mpares very favorably with the to- s of 646 tons caught during the ole month of March, and 2,134 ring February.

Still, the year-to-date figures were appointing. The 1961 total for nuary 1 to April 15 was 7,652 tons contrasted with 21,490 tons for same period of 1960. The land- s consisted mostly of Jack mack- l. Anchovies were still scarce, only 5 tons having been landed in the ole time between January 1 and ril 15.

Mackerel fishermen were getting 2.50 a ton for their fish, a price 50 per ton higher than previously. is, according to Joseph Monti, sec- ary and business agent of the n Pedro Independent Fishermen's ion, was the result of negotiations cluding a short strike) concluded March and involving, besides the on, the Fishermen's Cooperative sociation of San Pedro.

A. Brajcich Skippers C. Vessel Owners

George A. Brajcich, owner of *Miss orgina,* has been elected president the Fishing Vessel Owners Associa- n of B. C., with Fred Kohse of the *ep Robber* vice president.

Directors for 1961 include: Emil sen, *Blue Pacific,* representing hali- fishermen; Robert Karliner Jr., *ific Harvester,* salmon; Kurt Lar- , *Western Girl,* herring; Joe Greg- , *Tatchu,* trawl; Arne Selnes, *B. C. ly,* tenders.

Chairman of the membership com- tee is William R. Logan, of *Dom- or.* Charles Clarke, *Western Pro- er,* represents the association in ernment affairs, and Norman Sig- nd is in charge of publicity.

John Clawson Family, with one son missing, pause a moment from their work as they fit their new troller **Lightly** for sea at Seattle.

LIGHTLY of Pelican

How John Clawson Built a Stand-Out Troller

● *Lightly* is a troller, a stand-out among the thousands of these vessels on the Pacific Coast from a number of points of view.

She's a do-it-yourself job, but a beautiful one, with materials and workmanship matching a rich man's yacht.

She's a design-it-yourself job also, a modified monohedron hull calculated to give speed without loss of comfort or carrying capacity.

She's a live-aboard boat, fit for a family of four, with a "hide-a-bed" davenport making up into a double bed.

She's twin-diesel powered, with the motors on elevated steel engine-beds, giving space to work under them, if necessary.

She's bronze-fastened, yellow cedar to oak frames; and is water-tight bulkheaded throughout.

In short, *Lightly* is a stand-out among thousands.

● John Clawson, a Pelican, Alaska, troller, built her himself, with a helper hired now and then. He's been at it since early 1960; and in mid-April *Lightly* was about ready to go fishing.

Mr. Clawson, who is a member of the Halibut Producers Cooperative, and delivers to it at Pelican, has an unusual combination of skills. Beside being a high-line fisherman, he's a skilled workman in both wood and metal; and something of a designer and an engineer beside.

Lightly is his own idea and own work from keel to truck.

She is 54′ overall by 15′ beam and 4.5′ draft. She is a yachty, cruiser-type troller, designed for speed and comfort.

Mr. Clawson describes her hull as a "modified monohedron, deeper forward, but with the lines quickly shaping into a constant section as they run aft."

● Modern materials and methods are generously used in *Lightly*. Her 1⅜″ net yellow cedar planking has Western red cedar wedges, 5/16″ butts, driven in resorcinol glue. Fastenings are bronze. Decks and bulkheads are double ¾″ marine plywood with Teracote architectural sealant in all seams, which of course are staggered. Shelf timbers are built-up laminations in waterproof glue.

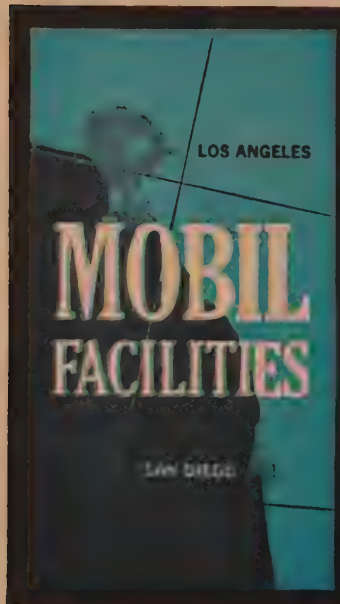
Graymarine 671 twin diesels are mounted on steel engine-beds with ample space between and below for working. While the engines turn in opposite revolutions, blocks are normal portside exhaust, making for more complete interchangeability of parts.

The diesels turn 26 to 20″ wheels through 1.5:1 reduction to give a theoretical speed of 12 knots.

Instrumentation includes an echo sounder, radio direction finder, loran, Wood Freeman non-hunting automatic pilot with remote control to the cockpit.

● Yes, *Lightly of Pelican* with her large size, cruiser type, high speed and twin diesels is a stand-out among thousands of trollers.

TUNA BOATS equipped with gear for new seining methods are refueled at the Pegasus Marine Co. dock at San Diego. Note how net is stowed on revolving turntable at the stern where the boom has dropped it neatly in place ready for further use.



PEGASUS MARINE CO., SAN DIEGO, the Mobil Marine Distributor, provides 24-hour-a-day fuel delivery service for the tuna fleet. Offering five fueling stations, plus two portable hose wagons, Pegasus can pump 30,000 gallons per hour. All diesel fuel is double filtered to eliminate water due to condensation. All Mobil Marine Lubricants are available in bulk and drums.

Large dock area is provided for
ing seine net repairs. Illustr
above shows net being run thr
Puretic Power block. (Named
its inventor, Mario Puretic, a f
San Diego tuna fisherman.)

HERE'S HOW WEST COAST TUNA FLEET STAYS AHEAD OF FOREIGN COMPETITION!

New purse seining techniques cut turn-around time over 60%

The San Diego tuna fleet is helping to meet foreign competition with revolutionary fishing techniques. Now practically abandoned is the use of cotton nets or the old bait and pole method. Instead, the catch is winched up to the boat by drawing the greater part of a new-type nylon net through a special power block on the boom.

With this new system it's possible to pull in a whole net load of tuna up to 4 times faster. Turn-around time has been cut from an average of 70-90 days under old method to 20-35 days with new system.

In fishing operation, nylon nets up to 3000-ft. long are suspended from floats down to about 45 fathoms. The bottom of the net is weighted with a chain "leadline." The boom holds the net high, then drops it neatly in place for the catch.

When tuna are sighted one end of the net is held by a skiff while the clipper circles the school. As the circle is completed the purse line is pulled tight, closing the bottom edge of the net and trapping the tuna.

In addition to building bigger boats equipped to operate with these new techniques, modern tuna fleets on the West coast are also making use of small planes to spot tuna from the air.

Also helping are Mobil Marine Distributors, like those shown below, who stand ready to provide fast efficient service and a complete line of the finest fuel and lubrication products.

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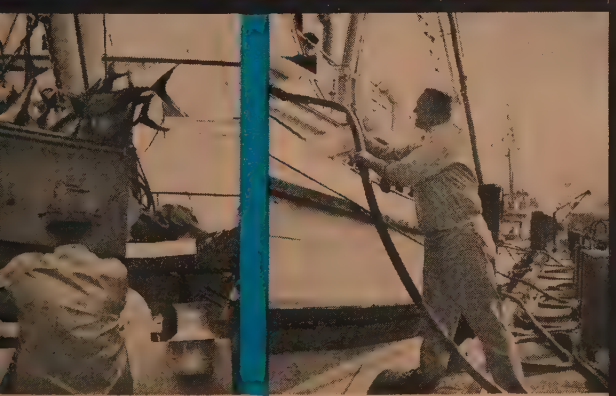

ERAL FISHERMAN'S SERVICE, INC. AT TERMINAL ISLAND in Angeles harbor serves the local fishing fleet and the San Diego tuna that put in to unload their catch at the canneries. Service is pro- around the clock at General Fisherman's 170-foot dock with its 7 pumping stations. Mobil Engineering assistance is available when re- d, and all Mobil Marine Lubricants are available in bulk or drums.

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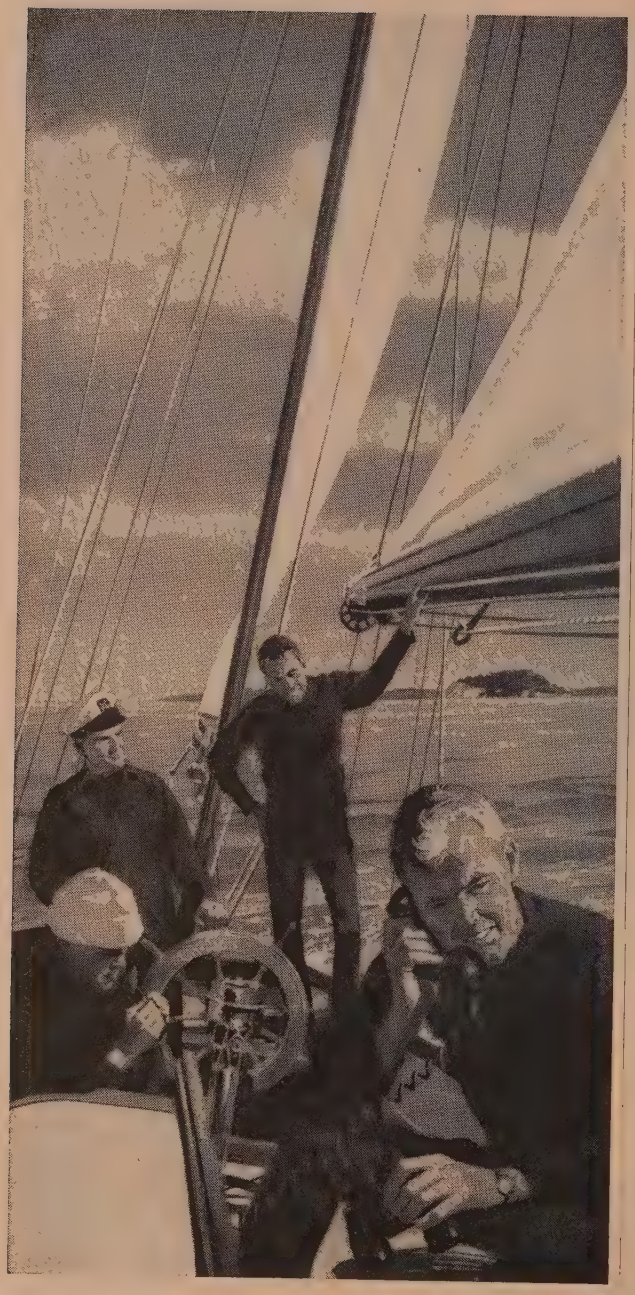

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Gillnet Mesh-Size Generates Controversy

Twixt Soviet and Japan as Well as Before ADF Board

Gillnet mesh size and its effect up- escaping salmon as well as upon e catch is a subject which invariably nerates heat between fishermen of fferent points of view, whether those fferences be national, state, or in- strial.

Mesh size produced the bitterest ar- ments concerning the Alaska Fish d Game Board's 1961 regulations. Likewise it generated active contro- rsy between the Soviet and Japanese legations in their annual conference draw the year's regulatory program the ocean fisheries of the Far East.

The Japanese announced they were epared to employ the increased- esh size of gear to the extent of 50% the gillnets employed, providing this s made general in all treaty waters. *ditor's Note* — The larger gillnet esh is 65 mm., and the smaller, hich the 65 mm. type is supposed to place over a period of four years ginning in 1959, is 60.5 mm. Means which the measure of mesh is ap- ed are not altogether plain.)

Japan said the 50% employment of e 65 mm. nets would tend to reduce e overall catch. Fishery Agency in- stigation ships report that the large- esh nets catch only 59% of the *mber* of fish taken in the small- esh gear; and that the decline in *ight* of catch made by the large- esh gear is 30%.

In the case of Pinks it was reported at the catch of the large-mesh nets 60% in number and weight both as mpared with the 60.5 mm. mesh.

Industry figures reported by Japan e slightly different. Operating com- nies say the large-mesh nets cut the tch by 60% in number and 40% in ight; with the Pink catch down to % in number and 60% in weight. The Japanese want gear mesh lim- tions to prevail throughout the en- e treaty area in order to avoid the cessity of changing net size as ves- s move from one area to another.

Soviet spokesmen attacked the all-mesh nets sharply, presenting ta along these lines:

Reds and Chums taken on the high as average about 2 kilos (4.4 lbs.) r fish, in contrast with weights of 5 kg. (7.7 lbs.) and 3 kg. (6.6 lbs.) r Reds in the coastal fishery of mchatka.

They declared this proves the Jap- anese high seas operations are taking many immature fish; and that the small-mesh nets catch an excessive number of females or of immature males.

According to the Soviet delegates, of the injured fish captured in the coastal fisheries in 1959 those bear- ing gillnet marks on the nose com- prised 98% of the injured. In 1960, with 25% of the Japanese gear com- prised of the large-mesh nets, the net- marked fish were down to 54%. These data were for Reds. For Chums the figures were 96% and 61%. The Soviets were inclined to attitude the percentage decline of net-marking to the use of the larger mesh in 25% of the Japanese gear in 1960.

Net-marked Pinks are said to be specially prevalent in the coastal fish- eries of some provinces. These are believed to be fish which have passed through the Japan Sea, where the Jap- anese fishermen use nets with mesh of only 47 or 48 mm.

Limited Licensing System Proposed as Control Upon B.C. Fishermen's Numbers

● Introduction of a limited licensing system with a view to gradual reduc- tion, over a period of possibly five years, in the number of British Co- lumbia's commercial salmon and hali- but fishermen has been recommended by Prof. Sol. Sinclair in a voluminous 256-page report tabled in the Cana- dian House of Commons.

Prof. Sinclair, head of the depart- ment of agricultural economics, Uni- versity of Manitoba, was appointed by the federal government as an in- dependent authority to suggest a plan of license limitation that would be in the interests of economic fisheries management. Proposals for license limitation had been advanced by the United Fishermen & Allied Workers and other groups.

Prof. Sinclair suggested a license fee of $10 per fisherman and a li- cense fee per boat.

Introduction of a licensing system, according to Prof. Sinclair, can be justified on the following grounds:

1. It will tend to bring the num- ber of fishermen and the fleet into closer adjustment with the ability of the fisheries to provide them with a more adequate return.

2. The license fee will operate as a deterrent to fish for many casual fishermen whose income from fish- ing is too small to be of any signifi- cance to them under current condi- tions.

3. A reduction in the number of boats should improve the net returns to the remaining fishermen operating on the restricted grounds.

4. Further government expenditures will be required to maintain the fish- eries in a productive condition, and those who benefit from the fishing should contribute in greater measure for the maintenance of it on a pro- ductive basis.

5. Payment for the right to exploit a resource is the common method in the Canadian economy.

Prof. Sinclair believes that the li- censing system at a fee should con- tinue for about five years during which time a reduction in the num- ber of boats could be expected. *Dur- ing that period no new licenses would be issued, and any licenses that had not been used in two successive years or voluntarily surrendered could be retired.*

During that tentative five-year pe- riod research would be carried out to determine the required fishing capac- ity to catch the available fish on an extended season and at an economic level.

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B.C. Fishermen Seek 5-Year License Moratorium; Salmon Quotas For Each Gear Type

● British Columbia's organized fishermen are urging the Canadian government to declare a five-year moratorium on issuance of new fishing licenses to avoid the danger of "an immediate rush by newcomers and nuisance applications".

This action was taken by the United Fishermen and Allied Workers Union at its annual meeting in Vancouver, in part as a sequel to Dr. Sol Sinclair's recommendation for reduction in licenses and their closer regulation.

The union maintains that commercial fishing licenses should not be issued to persons who did not hold at least one commercial fishing license last year, the only exceptions being fishermen prevented from fishing because of illness, sons of fishermen reaching license age this year, or other special circumstances.

Speakers at the union meeting were not entirely in agreement with all the Sinclair report but, as Pete Jenewein pointed out, license restriction is "the most important single issue facing the fishing industry today."

● H. "Steve" Stavenes was re-elected as president for the eighth consecutive year. Homer Stevens, secretary-treasurer for the past 13 years, and Alex Gordon, business agent since 1945, were also returned to office.

New vice presidents are: W. W. Paulik, big boat fishermen; T. (Buck) Suzuki, small boat fishermen; Clayton Hibbert, tendermen, and Jack Cook, shoreworkers, who died suddenly only four days after the final session.

Following were elected to the general executive board: Harry Allison, Harry Corlett, Alex Eyton, Elmer McEachern, Douglas McKay, Jack Nichol, Kay Nygren, Jim Patterson, Pete Pavelich, Reg Payne, John Person, Dave Rutka, Charles Schule, Axel Strom, Eva Vaselenak, Joseph Jacobs. Board of trustees—Walter Ironside, Elgin Neish, Harvey Proctor.

Delegates decided to open a campaign designed to obtain a division of the total catch of salmon between the seine, gillnet and trolling fleets, the basis being (1) actual poundage of salmon of all species caught by each section of the fleet in the years 1951-60 inclusive, (2) corresponding values of the catches by each type of gear and (3 actual numbers of regular commercial fishermen in each fleet.

● The union also endorsed a federal government program to spend from $5,000,000 to $10,000,000 annually to restore depleted salmon runs in B.C. and protested the "growing danger to salmon stocks in the North Pacific due to mid-ocean operation of Japanese mother ships;" and renewed a plea for negotiation leading to inclusion of Soviet Russia in the treaty covering fisheries in that area.

Soviet Fleet Stirs S. W. Africa

● Appearance of a large Soviet fishing fleet off the South-West African coast has alarmed the Southern African fishing industry and has stimulated a call for the extension of the Union's territorial waters from three to 12 miles.

Using its large stern trawling factory ships of the *Pushkin* and *Mayakowski* class, the Soviet industry has for some time been operating off the coast of West Africa. According to reports, catches from there have included sardines (*Sardinella aurita*).

In January ships calling at Walvis Bay brought reports of Russian vessels off the coast of Angola and then early in February the first factory trawler was sighted near Walvis Bay. Since then the research trawler *Muksun*, built in Britain in 1956, and the 3,700 ton Mayakowski factory trawler *Izumrud* have called at Walvis Bay for fuel and stores. Other ships have been sighted off the coast and the fleet is now believed to comprise at least five factory trawlers: the *Muksun*, which may have moved off in search of new fishing waters; the 10,000 tons refrigerated transport *Atiubinsk* and another transport; and a small tanker.

This extension of Soviet fishing activities to the rich waters of the Southern African West coast, writes our Cape Town correspondent, is an indication of the wide-ranging activities of the modern Russian factory trawler.

Officers aboard the two ships which visited Walvis Bay stated that they were not interested in the area's vast shoals of pilchards and the signs so far are that the trawlers are working demersal fish — with the addition of small catches of maasbanker or Jack mackerel — on a large and still undeveloped bank extending about 60 miles to sea off Walvis. But a statement by Moscow Radio that rich fishing grounds containing mackerel and other fish had been "discovered" off the Southern African coast can be taken as a warning that Soviet fishing may not in future be confined to bottom trawling.

Skin-Divers Exploit B. C. Abalone Beds

Exploitation of the abalone beds of Barkley Sound, west coast of Vancouver Island, was initiated on an experimental basis late in February by a group of skin-divers.

"If we can harvest 10,000 lbs. of abalone in ten days, we expect to stay in business," said Gino Gemma, spokesman for the group. Bob Bamford, who discovered the abalone near Tofino while diving there last fall, is confident that the effort will pay off.

Bamford and his fishing crew will have under-water pens in which to keep the abalone alive until the quantity is sufficient to be picked up by a fast packer for transportation to Vancouver or Victoria.

In the past, B. C. fishermen haven't found it practical to harvest abalone. Supplies for B. C. restaurants are now from California.

U.S.S.R. Wins Herring Order from Alaskans

Placing of an order for approximately 1,000 tons of salt herring for Japan with the Soviet Union's Far Eastern fisheries authority is reported in the U. S. Bureau of Commercial Fisheries' Market News Service for March 6. The price is reported as between $80 and $95 per metric ton—thus with a top figure of about 4.5¢ per lb., delivered in Hokkaido.

What the Pink Sheet does not say is that negotiations were under way with Alaskans to provide this fish, but that the Soviet bid was so far under anything the Americans could quote that the opportunity was lost.

Another item of the Russian proposal was the specification that the herring should be size graded with a minimum of 10".

Tongass" Goes Modern in Motor And Hydraulic Deck Gear Drive

With 30 years of halibut fishing hind her, *Tongass* starts on her urth decade this spring with a new lse—that of a 190-hp. diesel, in- lled to supplant the 100-hp. motor hich served her long and well. She's odernized in more than motor also, r she becomes the latest vessel in e halibut fleet to join the trend ward powering deck gear with hy- aulic drive.

Owned by Capt. Nels Stangvik, us Dahl, chief engineer, and Paul amnes, *Tongass* has been one of e steady, dependable producers of e halibut fleet ever since she was ilt in Seattle in 1930 by Ole Mo- rg. She is 68' overall, with beam 16.8 and depth of 9.1'.

Well-built and well cared for, she's ll sound and worthy of her new esel, which is an Allis-Chalmers, odel DAMR-1125, which develops rated 190 hp. at 1,600 rpm, deliv- ing it through a Capitol 3.88:1 re- uction and reverse gear. The front d of the A-C has a Twin-Disc ower take-off, Model CL-110. The llis-Chalmers diesel was purchased om Pacific Marine Supply Co.

Tongass fishes and carries crabs on ccasion and may fish Albacore dur- g the off-season for halibut, and is tted with a 16-hp. Lister diesel hich powers the 4" pump which elivers circulating water to the bait nk or live hold while engaged in ese fisheries; and which serves also r battery charging.

Navigational equipment includes a 50-fathom Bendix depth recorder, a 0-watt Apelco radiophone, and Apel- radio direction finder, and a loran.

Particular interest attaches to *Ton- ass'* deck gear drive.

Her halibut gurdy and anchor inch were modified by The H. A. hompson Co., Seattle, for hydraulic peration, using Vickers pump and ydro-motors. Control of these units, s well as of the main engine and utch, is handled from the pilot house rough Mathers controls.

Thus the skipper has full control f gurdy and winch speed. This type f drive is gaining rapidly in popu- rity in the halibut fleet, with per- aps a dozen vessels powering their eck gear hydraulically. Four of the stallations have been made by the hompson firm.

Tongass tries her new machine in quiet waters, but once in the open her 190-hp. Allis-Chalmers marine diesel drove the venerable vessel at 10.2 knots.

Partners in Tongass — Capt. Nels Stangvik, skipper, stands between Paul Stamnes, left, co-owner, and Gus Dahl, part owner and engineer.

Columbia River Whaling Seeking Meat fo

Whale gun testers at the Warrenton, Ore., plant of Bioproducts, Ltd., prepare the way for resumption of Pacific Northwest whaling after many years. Rich. Carruthers, Bioproducts executive, designed the gun mount, while Alva Elliott, former naval gunner on the Bioproducts staff, conducts the test firing.

● Pacific Northwest whaling is du to start this month with the forme halibut vessel and trawler *Tom & A* hunting out of the Columbia Rive and delivering its kill to the plant o Bioproducts Oreg., Ltd., at Warren ton, Ore. The venture was promote by the Oregon Fur Producers Associa tion, of which Charles Smith of Sea side is president and Marv Hille o Astoria manager.

Tom & Al is commanded by Cap Eben Parker, and his gunner is als his brother, Frank Parker.

At the Bioproducts plant the mea suitable for feeding fur-bearing an imals will be packaged and frozen Other portions of the whales will b available for reduction into industri products.

Whaling gun shown in the accom panying photo was imported fro Norway and mounted on a swivelle stand for the bow of the *Tom & A* The mount was designed by Rich Carruthers, Bioproducts executiv and built by the company's shop where Orvo Piipo, Norman Thompso

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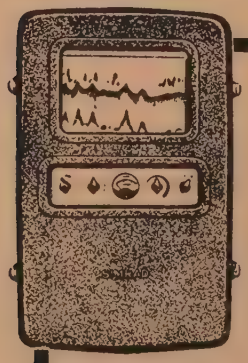

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Minks

and Elmer Maki are mechanics.

Bow structure of the *Tom & Al,* which is owned by the Parker brothers, was strengthened and the gun mounted by Astoria Marine Construction Co.

• Whaling has proven economically profitable in the past few years on the California coast in spite of depressed markets for meal and low oil prices. This phenomenon has been possible only because of the large market in California for pet foods, to which the whale meat is admirably suited, giving a higher-than-usual economic recovery from the whale.

Fur animal feeding is expected to make whaling similarly profitable in the Pacific Northwest. There has been no whaling in Oregon and Washington for many years, although a quarter century or more ago there was an operation at Bay City, on Grays Harbor.

British Columbia whaling, conducted with varying success for a number of years, was suspended in 1960 as result of world market prices and high costs attributed to union wage demands.

Want the Details On Tuna Seining?

• Development of purse seining for tuna in the past two or three years has been revolutionary — one of the most sweeping and significant changes in the whole history of fishing.

What produced the change?

How are the boats equipped?

Most of all, how are the nets fished?

And how are they made?

These are questions asked and asked again. In its June issue, which will be devoted almost wholly to the subject of tuna seining, **Pacific Fisherman** will provide authoritative answers for these questions and a hundred more.

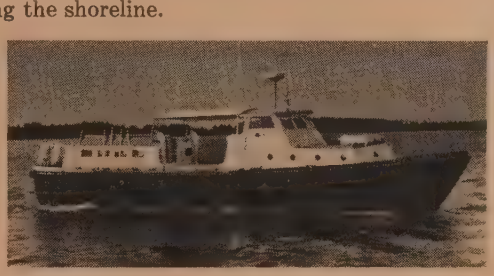
• **Pacific Fisherman** subscribers of course will receive copies; but if you want extra copies, or are not a subscriber, the certain way of avoiding disappointment is to place your order and remittance in advance of May 25 with:

Charles C. Baake, Circulation Manager, Pacific Fisherman, 500 Howard St., San Francisco 5, Calif.

"Our RCA RADAR N3A is extremely sensitive and completely reliable"
. . . says Capt. Junius Crochet, Skipper of the "Zelma," W. A. Richmond fleet

"You just can't beat the RCA N3A Radar as an aid to safe navigation," reports Captain Crochet. "Here's an example of how important it is in our daily operations. On a recent outbound trip to the Gulf, with a load of passengers, through dense fog, our RCA Radar picked up a tiny target. I reduced speed and kept the target under constant observation until we came near. Through a break in the fog I spotted a towboat and three barges—stopped because of the fog! It's a real comfort to have the RCA Radar aboard—an extremely sensitive and completely reliable unit under all conditions."

Small in size, yet rugged enough to withstand the severe beating it takes aboard the "Zelma," the RCA Radar N3A is a natural for fishing vessels and workboats. The three-unit construction puts the transmitter/receiver unit below decks where it belongs, cutting service costs to a minimum. The small, lightweight antenna and radome, just 27 pounds in all, can be installed higher on the mast, thereby increasing range without affecting vessel stability. The RCA Radar N3A features a seven-inch scope, 3 KW peak power and four range scales of ½, 1½, 6 and 18 miles, the latter being particularly useful in detecting high land masses along the shoreline.



The "Zelma" is one of six crewboats operated by the W. A. Richmond Boat Rental Corporation of Morgan City, Louisiana. Two other boats are also equipped with RCA Radar and similar installations are planned for the other three boats. "I see a large and continued future for crewboats equipped with modern electronic gear," said Mr. W. A. Richmond, fleet owner, "that's why I keep my vessels as up-to-date as possible."

Find out how this new compact radar from RCA can help your fleet to navigate better for increased safety and profit. For further particulars, write to RCA Radiomarine, Fleet Marine Equipment, Dept. U-413, Building 15-1, Camden, N.J.

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RADIO CORPORATION OF AMERICA

Double-Braided Lines Win Applause Among Seine and Gillnet Fishermen

• Double-braided synthetic fiber ropes—usually of nylon, but often of other fibers or a combination of two—are among the modern equipment items which are making life brighter and shares bigger for fishermen.

In such specialized uses as purse lines for salmon seiners, and other vital functions of fishing, braided ropes—and especially the double-braided type—are reported by fishermen as possessing special advantages and delivering special service.

This is due in large measure to manufacturer's ability to "tailor" these double-braided lines to meet the specialized requirements of the rope's particular fishing function; or to fit it to meet a combination of demands by means of a combination of fibers.

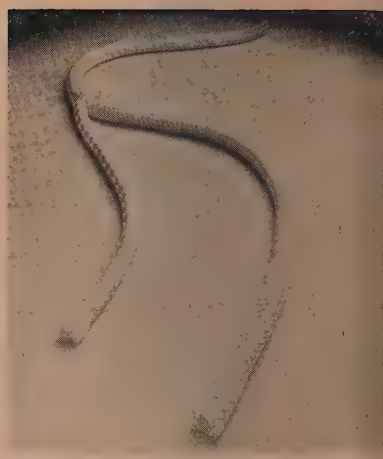
These advantages for braided ropes of modern synthetic fibers are pointed out by C. P. Jones, sales manager, marine and industrial division, Samson Cordage Corporation, Bellingham, Wash., manufacturers of braided ropes, including the double-braided type which it calls Samson 2-in-1, for the manufacture of which a patent is pending. This specialized rope has been fished for eight years in all climates with exceptional success. The company manufactures this 2-in-1 braided rope in Shirley, Mass., as well as at its West Coast plant in Bellingham.

Mr. Jones says of these lines: "We produce many different kinds of rope, of course, such as purse lines, rigging lines, net lines, crab buoy lines, and our unique lead-core lead line, in which the lead weights is *inside* the entire length of line.

"The double-braided lines are actually a braided center, around which is braided an outer sheath. Both elements may be of one fiber, or the sheath may be of one and the core another for specialized purposes. Tests indicate for this construction 25% average increase in strength over other types of rope of the same size and material."

The double-braided feature makes a rope which is said to be readily spliced. All that is necessary for an eye-splice is to take out a section of the center, make a loop, re-insert the center into the cover and tuck the cover strands into the center. Full splicing instructions are furnished all users.

For fishermen the characteristics of the rope as to stretch or resistance



Double-braided construction is shown in this photo of an all-nylon Samson line.

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RCA Radiomarine "N3A"

Now a dependable compact radar in a low-cost package for small vessels. The RCA "N3A" gives a large seven-inch scope with a sharp presentation. Four ranges to 18 miles. The same construction you'll find in more expensive radars. Ask about our complete line of dependable RCA Radiomarine electronic equipment.

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ye-Splice such as this can be made
n five minutes in a double-braided
ne.

o it, to lightness and workability as
ell as strength, to resistance to
brasion as well as to rot and mildew,
re all vital. Mr. Jones points out
nat with double-braided rope it is
ossible to build-in shock-absorbing
retch; or up to 60% less stretch,
desired. Rope may be made heavy,
r light enough to float.

Purse seiners find double-braided rope specially good for purse lines, which grip the winch gypsies without chattering, due to their exceptional surface contact with gypsies or sheaves. Mr. Jones receives reports of fishermen using double-braided lines 4 to 6 seasons.

Puget Sound purse seiners—and there are 563 of them licensed to fish in the 1961 season—are particularly enthusiastic about double-braided lines. John Marincovich, owner of the Everett seiner *Cheryl Ann,* reports to Mr. Jones: "Your purse lines performed excellently last season. We never had a hard roll-up; and could purse the entire net at all times. Samson braided rope is easy to handle, passes smoothly around the winch gypsies with no jerking."

Seiners report they help in making more sets in less time, also. Capt. Peter Xitco of Bellingham, fishing the *St. Rita,* reports: "The new Samson purse line's qualities surpassed those of any I have ever fished. My crew and I are sold on it. Every time the seine is being picked up over the power block the braided line has a self-straightening effect. No web roll-up, ever. The winch men really like it."

Gillnetters also find the pliability of double-braided line particularly easy to work with, its smoothness runs beautifully over the fairleads, the lead-core lead line gives a smooth, effective lead line. One gillnetter, Melvin L. Marvin, using Samson lines on his net, says he believes they will last for eight years—that's two Sockeye cycles.

Jack Wolf Transferred To Calpak Headquarters

Jack Wolf, for a number of years superintendent of the Alaska Packers Association cannery at Chignik, is being transferred to the headquarters office of the California Packing Corporation in San Francisco.

He returned to Seattle briefly in March following a trip to Peru and Chile in connection with his new duties.

Seattle Troller Drowns

Norman Bowden Vines, a Seattle troller aged about 60, drowned near Alert Bay, B. C., at the first of April as he sought to swim ashore from his grounded troller *Maria,* which he was operating alone.

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Fishermen and other work boat operators like Hi-Tex best. They prefer it because it resists chipping, cracking, the bite of salt spray and all the other hardships of marine use. And . . . equally important . . . it stays brighter after two years than many enamels after one! In white, or 20 brilliant colors, there's real economy in high quality Hi-Tex. Ask for it at your dealers today.

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QUALITY PAINTS SINCE 1903

Calif. Troll Opening Yields Good Prices but Few Salmon

● "Where are the fish?" At press time a week after opening of the California commercial salmon season, fishermen asked the question. Feed was plentiful. Skippers reported schools of anchovies close to shore. Farther out, small shrimp, favorite diet of salmon, had been found by a whale boat. Price is good: 60¢ a pound for "splitters" and 50¢ per pound for fish under 12 lbs. being offered to those lucky enough to have fish aboard.

Before dawn on April 15, a steady procession of newly painted white trollers moved down Moss Landing slough and out the channel. Bigger boats headed north for Pigeon Point, Half Moon Bay and the Farrolones. Fishermen from Eureka, Fort Bragg, Bodega Bay and the Monterey clipper fleet from San Francisco, joined the southern group searching for salmon in waters off the central coast that had produced fish in "take home pay" amounts last year.

From San Diego, Lloyd Myking on the *Ragnar M.*, Ted Jacobsen on the *Teddy J.*, Jim Brandenburg on the *Aquarius*, Leif Reinholdtsen on the *Norfjord*, Earl Gronnel on the *Two Bens* and Don Stewart on the *Novi* stopped over in Moss Landing for fuel and supplies.

Joining them several days before the season opened was the usual contingent from Morro Bay including Dudley Rowe, veteran fisherman on the *Kay*, Wilbur Northrup on the *Destiny*, Arnold Ennis of the *Gladys E.* and William Hansen on the *Doris*.

Additional adverse factors hampered the trolling fleet. After two days of bright sunshine and a "flat" ocean, strong northwest winds up to 35 miles an hour, sent the fleet back to port. Moss Landing, which had been practically emptied of vessels, was full again, as fishermen waite out the weather.

The other baffling obstruction good fishing was the presence of bas ing shark in large numbers in Mo terey bay. These harmless creatur lie inert just below the water. Tro ing gear has been fouled up and lo when fishermen put out their lin and make contact with the great wa lowing bodies.

The picture was not encouraging late April. It takes good weather, good price—and fish, for a successf season. So far the only one of the fishermen can claim is the 60-5 price.

No boat had more than 17 salmo for the day or two they were able fish before the weather "came down

"Makes you want to put an o over your shoulder and walk inlan until someone asks what you're carr ing," one fellow said.

"Well, it's only the first week," sa another, "so all we can do is hope t salmon will appear."

Harold Chaney Heads Halibut Producers Co-op

Harold Chaney was elected pres dent of Halibut Producers Cooper tive at the annual meeting in Marc Other officers include: Walter Ho stad, first vice president; Arthur Th berge, second vice president; Albe Schramen, secretary; Ingvald As treasurer.

Beside the officers, members of t board of trustees include: Nils Ober Chris Barr, Robert Gay, N. A. Ande son, W. L. Andrews, Hjalmer Savikk Karl Engberg.

W. B. Johnson continues manager.

Diesels for Trollers

Leonard Forseth, skipper of t troller *Wendy R.*, and Isaak Grottin skipper of the troller *Randi*, both Eureka are each repowering their cra with Tasco Parson 4 cyl. Ford marin diesel engines purchased from Thom A. Short Co., Oakland, distributo through Lyman Repair Service, Eur ka dealer. Both engines had 3-1 r verse and reduction gears.

Harry Stephanus Dies

Henry A. Stephanus, one of the old time Alaska cannery superintendent died in Seattle about the middle March at the age of 81.

For many years prior to his retire ment in 1951 he was a vice presider of the Sebastian-Stuart Fish Co. an was superintendent of its salmon ca nery at Tyee, Southeast Alaska.

★ SELLING & BUYING ★

12¢ a word per time, $4.00 minimum. (For box numbers addressed to PFN, add $1.50.) Business card display—$29.00 per column in. per insertion, with lower rates on contract basis. Mail all copy to PACIFIC FISHERMAN'S NEWS, 71 Columbia St., Seattle 4, Washington.

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Refrigerated Northern Albacore Trollers, Salmon & Crab Boats, Seiners, Draggers, Monterey Clippers, $1,000 & Up. Now off-season moored ready for inspection. WOODWARD BROKERAGE, Moss Landing, Calif. NEwton 3-2620.

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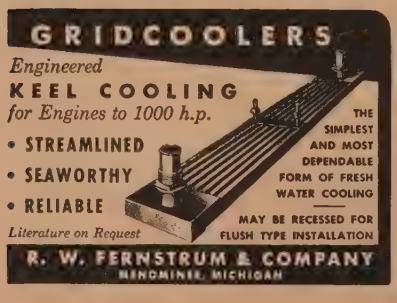
ATTENTION Halibut Fishermen. Herring bait pound situated in Quarry Bay, Nelson Island approximately 1 hour west of Welcome Pass on the mainland side Malaspiana Strait. East Access. Call M. V. Sea Dew 2638 or 2318. Res. TU 32694, Pender Harbor.

FOR SALE — Parts for 8-cylinder Joshua Hendy diesel including 3 to 1 reduction gear, cam shaft, upper half rear cam shaft housing, front housing for power takeoff complete with chain and sprockets and four groove pulley.
152 HP Superior GDB engine and gear. 15 KW, DC, Hercules gas power and also 10 KW, DC, Hercules gas power.
STANDARD MOORAGE, 7720 S.W. Macadam St., Portland, Ore. CHerry 4-5641.



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Pacific Fisherman's

HIGHLINE CORNER

Ideas, Devices, Methods Fishermen Find Profitable

rn turns to King crabbing in Southeast Alaska during the off-season for lmon. Her stabilizer poles, specialized gear for Noyes Island seining, are ainly seen.

tabilizers Keep Seiners ishing Off Noyes Island

Stabilizers contribute a lot to the ccess, safety and comfort of seining the rugged conditions off Cape Adngton, westerly tip of Noyes Island, utheast Alaska. They have become andard on the vessels of the hardy et which regularly works this most posed area frequented by "Alaska niters."

So says Gil Hamilton, and he ought know, for he's been seining there r 30 years; having started at the age 11, when he lived at Craig hard-by, and fished with his father, George Hamilton.

Gil lives in Seattle now and fishes his Alaska limit seiner *Tern* summers for New England Fish Co. at Noyes Island. This spring he took her north to have a go at the just-developing fishery for King crab in Southeast Alaska. He's delivering to William Smith, who has crab canneries at Wrangell, Juneau and Tenakee.

● But getting back to the stabilizers: You see the *Tern* carrying them in the photo; but Gil says these poles are too short—22′. He thinks they'd be a lot better if they were 28′.

The Cape Addington seiners of course borrowed the stabilizer idea from the salmon trollers, just as the trawlers and halibuters have done. Nowhere, Gil Hamilton thinks, are stabilizers of more benefit than in the steep, hard seas off Cape Addington. Fishing there is good—if you can stand up and work; and the stabilizers help a lot with that. By the way, he carries about a fathom or more of ¾″ Stalon —stabilized nylon rope—just above the metal stabilizer, so the elasticity of the nylon will absorb some of the shock when the *Tern* rolls and the stabilizer jerks in checking her.

Tern herself is powered with a General Motors diesel, and has a 100-hp. Ford diesel from Pacific Marine Supply Co. in her seine skiff. "We need it, too, in those violent seas off Noyes Island," says Gil Hamilton. The fishing there, you know, must be done in a narrow stretch of water only three miles wide, between the high seas, where net fishing is "out," and the rocky coast with its wild surf.

● *Tern* is only one of a four-boat Hamilton fleet, all fished by brothers. Beside Gil and his *Tern* there are *Janice*, owned by George Jr.; *Salute*, the property of Don; and *Invader*, which is Harry's.

All four use "Sea King" nylon seines made by the Fish Net & Twine Co. and bought from Seattle Marine & Fishing Supply Co.

Sea conditions off Cape Addington have influenced the adoption of other specialized gear beside the stabilizer. Generally the seiners fishing there lace the selvage of their nets to the hanging of both cork and lead lines, reducing wear from the selvage sawing in the hanging. Also, the lace is designed to break under strain if the net hangs up, thus saving a bad tear.

Again, for fishing out there at sea where the nets work a lot, the Cape Addington seiners use spun nylon hanging twine, and paint the hanging hitches around the lines with "liquid nylon" to inhibit slipping along the synthetic lines.

STANDARD ENGINEER'S REPORT

Tuna clipper weathers 25 years of rugged duty with no failures...on RPM DELO Oil

Since her launching in 1935, the 92-foot tuna clipper, MV Benita, has made five trips a year in Southern waters. Most of the trips have been 1000-2000 miles long. Only RPM DELO Heavy Duty Lubricating Oil has been used in 25 years operation.

"As long as I'm her owner," says Matteo (Matt) Ghio, "we'll be using 'RPM DELO' and Chevron Diesel Fuel in the Benita. We've given her some pretty rough going down through the years. But we've never had any trouble with piston rings sticking, rust, carbon or sludge. And when the chips were down, the Benita's diesel has never failed us. 'RPM DELO' has kept it in fine shape."

Shipnotes: A 225-horsepower Union engine powers the Benita. She carries two auxiliary engines: An Atlas and a GMC. Up to 100-tons of fish can be stored in the hold.

Marine lubrication problems? Let one of our technically qualified engineers solve them for you. His experience and the wide range of top-quality Standard products assure economical solutions to any lubrication problem.

The free technical assistance of a Standard Engineer is available at all major West Coast ports. For more information, contact any Standard Oil representative, or write: 225 Bush Street, San Francisco 20, California.

LUBRICATING OILS RPM DELO

STANDARD OIL COMPANY OF CALIFORNIA

TRADEMARKS "RPM DELO" AND CHEVRON DESIGN REG. U.S. PAT. OFF.

HANA—Halibut Association of North America brought these men together to talk national promotion of halibut at the N.F.I. convention in Washington. From left, standing: **Myer Bornstein,** Bornstein Seafoods; **E. A. Ruthford,** San Juan Fishing & Packing Co., president of the Association; **Frank Barrett,** New England Fish Co., Boston. Seated, from the left: **T. P. Weaver,** Weaver Seafood Sales, Boston; **Rufus A. Littlefield,** Seattle Seafoods, Inc.; **W. B. Johnson,** Fishermen's Federation, Seattle; **Palmer G. Olson,** New England Fish Co.; **W. C. Eardley,** Whiz-Eardley Fisheries; **K. I. Dahl,** Dahl Fish Co., Bellingham; **Ray Brooker,** Rupert Fish Co., New York (in front); **Norman E. Weitkamp,** Washington Fish & Oyster Co.

Fabulous 95% Backing Supports National Promotion of Halibut

The newly launched Halibut Association of North America, which was ormally organized in Seattle this oring with 95%-plus industry backg, went on the national stage at Vashington, D. C., late in April when articipating members attending the Tational Fisheries Institute Convenon conferred at length with officials f the Advertising & Promotion Divion of the N.F.I. and the J. Walter hompson Company, through which he Halibut Promotion Campaign will e conducted. Preliminary plans were ade in the course of the conferences or concentrated research into the halibut merchandising picture during the ext few weeks, with a meeting scheded for Seattle late in June to conder the results of the studies and to etermine definitely the timing and haracter of the initial aspects of the romotion.

At the June meeting it is anticipated hat Murray Wheeler, N.F.I. Director of Advertising & Publicity, will have a program ready for submission to the Halibut Association membership. It is to be expected that the principal activities of the promotion program will be initiated in the early fall, but that opportunities presenting themselves during the intervening months will not be missed.

The remarkable accomplishment of the Halibut Association of North America in securing the adherence to its program of more than 95% of the North Pacific halibut catch was widely hailed at the N.F.I. Convention as an almost unprecedented achievement in cooperation within the fishing industry. The program was regarded as of particular importance at a Convention which was more than ever before concerned with the necessity for attention to promotion and merchandising of fishery products.

E. A. Ruthford of San Juan Fishing & Packing Co., Seattle, was elected president; with Richard Lambe of British Columbia Packers, Ltd., Vancouver, vice president. Treasurer is Don Johnston of Seattle Seafoods, Inc.; and secretary is William S. Gilbert of New England Fish Co., Seattle.

Trustees of the association are:

Alaska: James Pinkerton, Ketchikan Cold Storage; Norman Weitkamp, Washington Fish & Oyster Co., Port Williams; Elton Engstrom, Engstrom Bros., Juneau, Sitka and Pelican.

British Columbia: Joseph Antonelli, Fishermen's Cooperative Federation, Prince Rupert; H. Borden Smith, The Canadian Fishing Co., Vancouver; Malcolm McCallum, McCallum Sales, Ltd., Vancouver.

Pacific Northwest: William B. Hall, Booth Fisheries Corporation; William C. Eardley Jr., Whiz-Eardley Fisheries; John McCallum, McCallum-Legaz Fish Co., Inc., all of Seattle.

At presstime, with a few primary factors among halibut dealers still to

be heard from, the following firms, representing about 93% of the business, had signed participation contracts:

Aleutian Cold Storage Co.; Washington Fish & Oyster Co., Vita Food Products, Inc.; Engstrom Brothers; Booth Fisheries Corporation; Halibut Producers Cooperative; Knut Thompson & Son; Kayler-Dahl Fish Co.; E. C. Phillips & Son; Ketchikan Cold Storage Co.; New England Fish Co.; Northern Products Corporation; Wrangell Cold Storage;

Atlin Fisheries; British Columbia Packers, Inc.; Booth Fisheries, Ltd.; Prince Rupert Fishermen's Cooperative Association; Pacific Fisheries Co., Ltd.; The Canadian Fishing Co.; Carlyle Fishing Co.; Lion's Gate Fisheries; McCallum Sales Co.; International Fishing and Trading Co.; Seaport-Crown Fish Co.; J. W. Nicholls; Seafood Products; Tulloch-Western Fish Co.; Vancouver Shellfish Co.

Crown Seafood Sales Co.; Rupert Fish Co.; San Juan Fishing & Packing Co.; Seaport Fish Co.; Seattle Seafoods, Inc.; Whiz-Eardley Fisheries, Inc.; Bornstein Seafoods, Inc.; Dahl Fish Co.; Everett Fish Co.; Main Fish Co.; McCallum-Legaz Fish Co.

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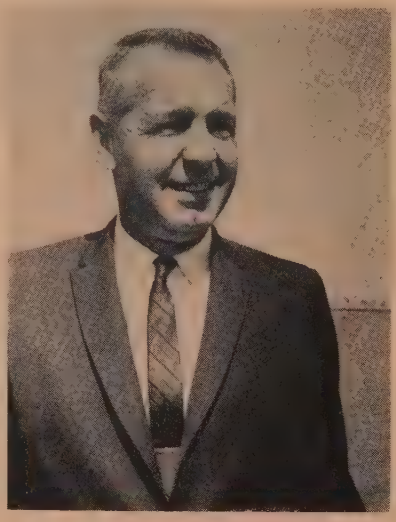
Quamma to Manage Van Camp Samoa Plant

Leonard B. Quamma will leave this month for Pago Pago, Samoa, to become manager of the Van Camp Tuna Co. plant, replacing Harold Morgan, who returns to Long Beach to assume other duties with the prominent canning firm.



Mr. Quamma is a veteran of 27 years with Van Camp Sea Food Co., mostly in San Diego, but more recently in Long Beach. He joined the firm in 1934 and came to the Los Angeles Harbor area in 1951. He is a real tuna-country man, born in San Pedro and brought up in San Diego.

Japan Won't Import 1961 Frozen Reds

Japanese companies will not be permitted by the Fishery Agency of Japan to buy American frozen Red salmon in 1961 for shipment to Japan and canning there.

This is reported from sources whose information is most reliable, and which are located both in New York and in Washington.

In 1960 there was a pioneering venture of this sort when a substantial quantity of brine frozen Bristol Bay Red salmon was shipped from Seattle to Japan under special permit of the Japan Fishery Agency. The fish were defrosted in Japan and

Los Angeles Marke

Current canned fish prices from Los Ang and San Pedro brokers and cannery sales partments, as reported at presstime by USBCF Market News Service.

Product	$/Case
TUNA (advertised)	
White, fcy., #½	15.00
White, chunk, #½	13.25
White, chunk, #¾ (2 doz.)	9.20
Light, fcy., #½	14.25
Light, chunk, #½	12.50
Light, chk., #¾ (2 doz.)	8.70
Grated, #½	7.50- 7
TUNA (Buyers' Labels)	
White, fcy., #½	11.50-12
White, chunk, #½	10.00-10
Light, fcy., #½	10.50-11
Light, chunk, #½	9.00-10
Grated, #½	7.00- 7
TUNA (Imported, Japanese, in brine)	
White, solid, #½	11.50-11
White, solid, #1 (2 doz.)	10.70-11
White, solid, #4 (½ doz.)	12.50-12
Light, solid, #½	8.90- 9
Light, solid, #1 (2 doz.)	8.90- 9
Light, solid, #4 (½ doz.)	9.50-10
SARDINES	
Tomato, oval, #1	6.00- 6
Natural, tall, #1 (2 doz.)	4.50
ANCHOVIES	
Tomato, 5 oz., 100s	6.00
Tomato, oval, #1	7.00- 7
MACKEREL	
Pacific, #1, tall	6.00- 6
Jack, #1, tall	5.75- 6

NOTE—All in cases of 48 cans unless oth wise specified.

canned in quarter-pound tins in sh canneries, designedly for export to United Kingdom.

At last information it appeared t the goods were still unsold in Jap and it is presumed that the decisi not to continue the permit in 1961 due to this fact.

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Salmon Distributors Mix Caution with Optimism

Consultation with factors of definite importance in canned salmon distribution in Chicago, New York, and Washington, D. C., late in April revealed opinions which if taken altogether might be characterized as "a blend of cautious optimism."

In the Middle Western market supplies appear to be at the point of exhaustion, so far as distributors' stocks are concerned, but stores are adequately supplied and following the end of Lent sales went into the flat period normally associated with the season, and which could be expected to continue until warm weather sets in.

"What canned salmon sales in the Chicago area need today is a heat wave," said a distributor from that city on an evening when the radio was reporting eight inches of snow in Chicago.

He found in his experience of the past year that the adequacy of supplies of Red salmon, albeit at high prices, was encouraging to the trade although he said he could only in all honesty report that retail grocers today regard salmon with something of indifference due first to the persistently high price and secondly to the persistently erratic supply. For the supply of Pinks and Chums to meet the requirements of the Midwest, South and the Deep South he felt the most serious concern.

Recovery of adequate supplies of Pinks and Chums from domestic sources was seen by this distributor as the greatest present need of the salmon distributor, short of lower prices.

Now for the opinions of the Eastern distributors:

While the domestic situation, or rather the situation with respect to domestic salmon in New York and Washington, appeared to be quite healthy, the New York opinion could not fail but reflect uneasiness at the amount of salmon which Japan appears to be carrying over into the new producing season.

One broker surprisingly reported that he knew there was still available Japanese tall Pinks and other grades in varying supply, including rather disturbing quantities of quarter pound Reds.

This matter of the supply of quarter-pound Red salmon in prospect for the 1961 season is giving serious concern to the Eastern distributors, for it is in their territory that most of the fish of American marketing is sold in quarters.

The prospect of a substantial increase in quarter-pound canning in Alaska, including even some on Bristol Bay; the certainty that Japan will be packing Reds on their factory ships with at least six filling machines going; and the prospects that British Columbia, with a larger run of Sockeyes due on the Fraser River, also will increase its pack materially over 1960, all combine to occasion real concern in the territory where most American quarters are marketed.

One distributor, he from the Middle West, expressed the belief that the quarter pound can, providing its contents is kept at the high grade level normally reserved for this small package, in the course of a few years may possibly become an item of increasing and even very real significance to the American salmon industry. His thinking was that the quarter pound can, while a poor *value* at best, at the same time can serve as a means of extending more broadly the supply of absolutely top grade salmon and may offer an entree for salmon into the shopping list of the new families.

He saw this encouraging possibility definitely as a medium range prospect.

ALAN DEHN

CHAS. HAZEL

Dehn and Hazel Join Salmon Institute Chiefs

Executive committee of the Canned Salmon Institute, which administers the salmon industry's promotional, advertising and educational activities, was enlarged and strengthened in March by the addition of two effective figures.

Robert Graham, Institute chairman, announced that K. Alan Dehn, president of Marine Foods Packing Co., Seattle, and Charles Hazel, sales promotion manager of the Deming & Gould Co., Bellingham, had accepted responsibility as members of the executive committee.

Anderson & Coltman Will Move Liverpool Offices

After more than 60 years of business in one location at 64 Stanley Street, Liverpool, the famous British salmon firm of Anderson & Coltman, Ltd., this spring is moving into larger and more modern premises in order to accommodate the growing volume of business handled by the firm's Liverpool branch.

Writing *Pacific Fisherman* from Anderson & Coltman headquarters in the Market Buildings at 29 Mincing Lane, London, A. C. Coltman, head of the house, reports that the Liverpool branch will be in its new quarters before the end of June.

This journal is proud of his commendation in which he speaks of "the excellent production of *Pacific Fisherman*, which continues to be a veritable mine of valuable information."

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Vita Food Undertakes $2 Million Expansion

A $2,000,000 issue of privately placed 15-year debentures has been announced by Vita Food Products, Inc., New York. According to Aaron Gilman, president of Vita, this working capital loan will be used to carry out the company's vast expansion program, which includes plans to streamline their present plant facilities and construct three new modern food processing plants, featuring major technological improvements in Chicago, Philadelphia, and Newark, N. J.

The new, special-purpose plant buildings are being designed and constructed to meet the specialized requirements of Vita's expanding business. Mr. Gilman said, "We will replace present, outdated facilities with the newest and most efficient methods of material handling and automation. We will install high-speed conveyor and processing systems, and we are ordering the most advanced packing and packaging equipment."

The new one-story, automated, high-speed processing plants will each include a completely equipped quality control laboratory to assure continued maintenance of Vita's high quality standards.

Seattle Market

Market prices currently quoted at presstime by Pacific Northwest brokers and cannery sales department, cases of 48 tins, unless otherwise specified, good quality, as reported by the U. S. Bureau of Commercial Fisheries, Market News Service.

Items and Packages	Per Case
Puget Sound	
Sockeye, halves	$ - 25
Sockeye, quarters	- 15
Alaska	
Red, talls	35 -*37
Red, halves	23 -*25
Pink, talls	- 28
Pink, halves	15 - 16
Med. Red, talls	31 - 32
Med. Red, halves	19 - 20
Med. Red, quarters	13 - 14
Chum, summer, tall	- 25
Chum, summer, halves	13 - 14
Chum, fall, 4-lbs. (12)	- 25
Chinook, talls	- 32
Columbia River	
Blueback, halves	-*27
Blueback, quarters	- 16.50
Chinook, fancy, halves	26 -*27
Chinook, fancy, quarters	16 -*16.50
Chinook, choice, halves	- 19.50
Chinook, choice, quarters	- 13
Silver, halves	- 19
Silver, quarters	- 13.25
Tuna, Northwest Pack	
Albacore, fcy., 7 oz.	11 - 12.50
Yellowfin, s/pack, 7 oz.	- 10.50
Yellowfin, chunk, 6½ oz.	9.50- 9.85
Tuna, Columbia River Pack	
Albacore, fcy., 7 oz.	14.85-*15.25
Albacore, fcy., 3½ oz.	8.85- 9.15
Albacore, chunk, 6½ oz.	10.50-*13.25
Albacore, chunk, 3 oz.	6.50- 8
Lightmeat, fcy., 7 oz.	*14.25
Lightmeat, fcy., 3½ oz.	8.55
Lightmeat, chunk, 6½ oz.	*11.00
Lightmeat, chunk, 3½ oz.	*7.50
Canned Shrimp	
Northwest: 4½ oz. wet pack	- 7.25
Alaska: Tiny (over 17 per oz.)	- 7.25
Small (10-17 per oz.)	- 8
Medium (6-9 per oz.)	- 10
Canned Crab	
Dungeness, 24, 6½ oz.	- 13
Dungeness, 24, 3½ oz.	- 8.25
King, fcy., 7½ oz.	- 32
King, std., 24, 6½ oz.	- 15
King, std., 24, 7½ oz.	- 16

*Advertised brands

American Can Co. Opens Astoria Plant

New fish can factory of the Ame can Can Co. at Astoria, Ore., w opened just before the end of Ap in time for the commencement of t Columbia River fishing season.

The plant, which is under the ma agement of A. S. Bergstrom, is locat in close proximity to the Elmore Ca nery, combined salmon and tuna pac ing headquarters of the Columb River Packers Association. It h 55,000 sq. ft. of floor space and is e pected to manufacture about 2 milli cases of cans annually.

On the same day the Astoria pla opened, Canco also dedicated a c manufacturing plant at Eugene, O

P.A.F. Dividend $1, Not $10, as Reported

Unhappily, the dividend paid stockholders in April by Pacific Am ican Fisheries, Inc., was $1, not $ as was mistakenly reported in the Ap issue of *Pacific Fisherman*.

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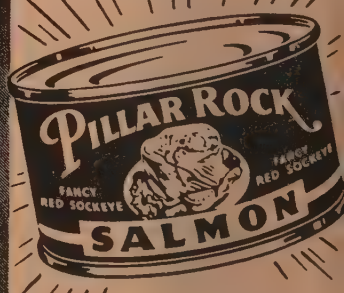

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Reinke, Stix and Frohman Picked as ASDA Backfield

American Seafood Distributors Association elected Miles Reinke of the ilbur-Ellis Company, Los Angeles, its new president succeeding Rich- d J. Kulze, who had served effec- ely for two years.

The ASDA annual meeting was ld in Washington coincidental with e National Fisheries Convention of nich most of the distributors Asso- ation members are also affiliates.

The Distributors Association con- ues to be notable for the unity of rpose and energetic interest of its embership. Basically they are dis- butors of imported seafoods, al- ough to a very large degree mem- rs also are active factors in the tribution of domestic seafood prod- ts, and in many cases in their pro- ction as well.

Unlike the National Fisheries In- tute, which has an iron-clad rule ainst participation in tariff mat- s and import problems, the ASDA akes them its primary area of ac- ity and is dedicated basically to e encouragement of free and active ding among nations in the products the sea.

Other officers of the ASDA, elected at Washington, are: Robert L. Stix, New York, vice president; Arthur H. Frohman, L. H. Frohman & Sons, Chicago, secretary; Bernard Berkovitz, Pittsburgh, treasurer.

Directors elected include: L. R. Besore, Fishermen's Federation, Chicago; Henry Branstetter, Crest Importing Co., San Diego; Ralph Carr, Mid-Central Fish Co., Kansas City; Gershon Feigon, Mid-Continent Sales, Chicago; R. P. Fletcher Jr., Booth Fisheries Corporation, Chicago;

Samuel Goldstein, Liberty Fish Co., Philadelphia; Robert J. Gruber, Blue Water Seafoods, Cleveland; Elliott W. Hudgins III, Baltimore; G. J. Kuhn, Ocean Garden, San Diego; Walter R. Meier Jr., Milwaukee; Harrison J. Pierce, Wilbur-Ellis Co., New York; Leo Weil, Fulton Fish Market, Louisville.

ASDA Leadership—Miles H. Reinke of Los Angeles, Arthur H. Frohman of Chicago, and Robert L. Stix of New York, ranking officers of the American Seafood Distributors Association.

Hovden, Sardine King", Passes Away

Knut Hovden, one of the men who ilt the Monterey sardine industry d made the 1-lb. oval can of sar- es in tomato sauce one of the nned fish staples of the world, died Guadalajara, Mexico, in March. was 81.

K. Hovden, as he was known roughout the fisheries, retired from tive business in 1951 when his alth failed, and had lived in Mexico ce 1952.

Norwegian-born, K. Hovden ached Monterey in 1906 and se- red employment with the F. E. oth Co., whose cannery then was only sardine plant in Monterey. . Hovden eventually became man- er of the Booth cannery, and then 1914 established his own business. He was an innovator and was par- ularly interested in improving the ality of California sardines through anging the early methods of pre- oking the fish in oil or brine. His ortola" brand of "grilled" sardines came famous and at one time the Hovden plant put out a number of quarter-oil sardine specialty packs under this label.

He also was largely instrumental in bringing about the shift in Monterey sardine fishing from lampara nets to purse seines with their larger boats and greater efficiency.

K. Hovden is gone, but on Monterey's Cannery Row stands a big cannery which carries on after a fashion in spite the decimation of the enormous sardine resource which K. Hovden knew and from which he as much as any man, save possibly F. E. Booth, built a great industry. It is the Hovden Food Products Corporation.

Lee Payne, U. S. Tuna Commissioner, Succumbs

The tuna fishing industry of the Pacific lost a devoted servant last month in the death of Lee F. Payne, member of the Inter-American Tropical Tuna Commission, past chairman and member of the California Fish and Game Commission and chairman of the Los Angeles County Game and Fish Commission.

In business life, Mr. Payne was publisher of the Temple City *Times*. He had been executive editor of the Los Angeles *News* for 15 years, and previously managing editor. He was an alumnus of UCLA.

Mr. Payne was a "charter member" of the Inter-American Tropical Tuna Commission, having served from its organization.

King Crab, Inc., Names R. J. Springhill President

R. J. Springhill, superintendent of King Crab, Inc., was named president of the company at the annual meeting of the stockholders in Kodiak, Alaska, in April.

Others elected included: Mack Mortensen, vice president; Ervin Thiessen, office manager, advanced to secretary-treasurer. Edwin N. Gunderson, port engineer, was elected a director.

Chris Poulsen of Bellevue, Wash., was elected a director and general manager of both King Crab, Inc., and its subsidiary Togiak Fisheries, formerly known as Island Seafoods, Inc.

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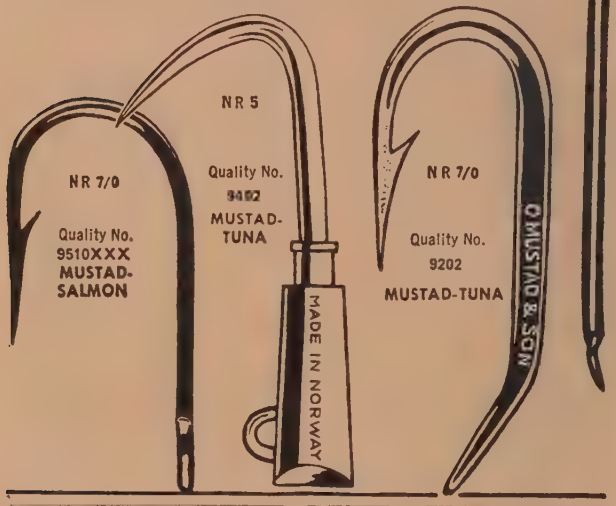

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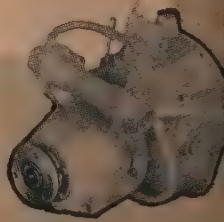

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What Are Problems in 4-lb. Salmon Canning?

Canning 4-lb. salmon requires special care, particularly in the processing and cooling steps, according to an analysis of present-day salmon canning problems by Louis G. German, supervisor of the American Can Co. Northwest district research and technological department.

He cautioned that 4-lb. cans must be water-cooled under pressure to prevent panelling; and that the pressure never be allowed to drop even momentarily below cooking pressure until the retort had been fully flooded.

Come-up time also should be a fully 30 minutes for a 210-minute cook at 240°. The 4-lb. can needs 20" of vacuum, which calls for 18" in the machine.

Mr. German finds salt seasoning as a point to be watched, for here examination reveals a remarkable range from no salt to gross over-salting.

He felt that the 250° processing cook had come to be an accepted practice in salmon canning, but warned that it should be employed only with accurate instruments, careful venting of the retorts, and after consultation with research laboratories on cooking time and cooling method.

Over-filling can be almost as bad as under-filling; and over-cooling can be a problem, although not as serious as one as under-cooking. Cooling cans below 100° he feels is an important contributor to can rusting.

Alaska King Crabbing Takes Rapid Decline

Alaska King crab operations turned sharply toward their close in early March at Kodiak Island and in the Shumagins; and were falling-off at Kodiak when Lowell Wakefield, president of Wakefield Fisheries, went south to Seattle, New York and Washington at the middle of April.

At that time only the Cook Inlet operations of the Wakefield spread were active, and they were continuing very good. The fishermen in the Selovia area resumed fishing late in March, finally accepting the 9¢ price paid across Shelikof Strait in the Kodiak area.

Fishing throughout the winter-and-spring season was generally quite good, although not as spectacular as that of 1960.

After the first heavy storm following the opening of March the crabs seemed to be scattered and this fact, together with the appearance of some soft-shells in the catch, led the fishermen to start thinking about halibut.

CAPTAIN GIL HAMILTON
of the "Tern"

"Sea King Filament Nylon Netting is hard to beat."

"In fact," says Gil Hamilton, owner of the Salmon Purse Seiner "Tern," "I think it is the best. I have used Sea King Filament Nylon Netting for the past five years in Southeastern Alaska, where the water is the roughest and the netting must be right."

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From Bristol Bay to San Francisco Bay, professional crab and salmon fishermen report consistent success with Tubbs synthetic fiber ropes as specified in the following table:

CATCH	ROPE USE	SIZE (diam.)
CRAB	**Nylon** pot warp (Alaska King Crab)	special lay 3/8" thru 1/2"
	Polypropylene pot warp (Pacific Dungeness Crab)	special lay 5/16", 3/8"
SALMON	**Nylon** tow lines, purse lines, lifting pieces for purse seining	5/8" thru 1"
	Polypropylene	
	gill net cork lines	special lay 1 3/32"
	purse seine cork lines	5/8" thru 3/4"
	purse seine breast & ring lines	1/2" thru 5/8"
	purse seine tow lines	3/4" thru 1"
	stabilizer & pole lines (Trollers)	3/8" thru 1"

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Anti-Struvite's Sanction Opens New Fish Canning Possibilities

● The troublesome problems of preventing the formation of struvite crystals in tuna, salmon, pilchard. sardines and other fish and shellfish, as well as recurrent discolorations, may be headed toward solution by a recent directive issued by the U. S. Food & Drug Administration.

This directive permits use of controlled amounts of the ingredient known as "Ca diSodium EDTA" in shrimp and crabmeat. This directive followed a petition filed by The Blue Channel Corporation of Port Royal, S. C., who holds patents for the use of this substance and also for Aluminum Sulfate in canned seafoods. The two ingredients are combined under a formula to be known commercially as "Strucol" and used as an additive to prevent formation of struvites and discolorations.

Following the issuance of the order by FDA, this company immediately notified the shrimp canning industry of its availability, method of distribution and use, as well as the cost. The application of "Strucol" to canned shrimp goes back six years, during which time Blue Channel experimented and tested its effectiveness.

Harris

The long delay in gaining FDA sanction has been due to severa causes. Principally, however, was th passage by Congress of a New Foo Additive Amendment requiring tha exhaustive proof be submitted an accepted by Food & Drug Admini tration showing that all ingredien added to food are non-toxic, nor carcinogenous and that they are e fective in accomplishing the purpos for which they are intended. Th Blue Channel Corporation was there fore required to complete many ad ditional tests and present the resul to the Food & Drug Administratio The thoroughness of such work wa of course time consuming but the re sults now give full clearance to the u of EDTA and Aluminum Sulfate whe used as directed. The latter ingred ent, the companion chemical in Stru col with EDTA, has previously bee cleared for use by FDA.

In a recent interview with Sterlin G. Harris, founder and President o the Blue Channel Corporation, whe asked if Strucol would work as effe tively with Tuna and other canne fish in preventing struvites and di colorations as in canned shrimp an crabmeat and, if so, why the FD directive did not include the latt items in its directive he answered

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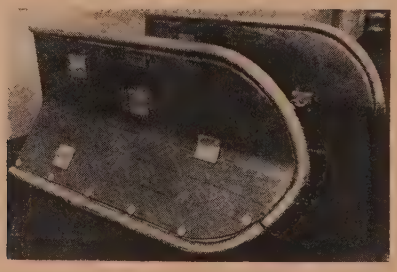

U.S. Pat. No. 2 816 385
Canadian Pat. No. 611 649
Other Patents Pending

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anned tuna and other canned fish re not included in our petition to A because we had no test data on se items at that time. Since the y now has been cleared for the of Strucol in shrimp and crab- at, it is logical to anticipate that etition for its use in canned tuna l other canned fish items will also eive favorable action by FDA, pro- ed, of course, that sound experi- ntal tests prove that Strucol is ef- tive in these products when used amounts permitted by FDA. A gram of research has already been iated by our chemists to do this y thing and if successful we will n petition FDA for its use in these ments of the canned fish industry. "We have reason to expect the same eficial effects," continued Mr. Har- "because a struvite in shrimp is same struvite in tuna. And, dis- orations in canned seafoods are the ne and caused by the same condi- except for pigmentations. How- r, we are dealing with very com- x chemical reactions, some of which still unknown to us and certainly ould be the last person to predict outcome. But, we are quite hope- "

The Blue Channel Corporation is a newcomer in the food business in this particular field of quality trol. Since 1939 it has ranged as arge canner of domestic crabmeat. has also canned shrimp and tuna the Atlantic Coast.

rt O'Brien, San Juan -Superintendent, Dies

Bertram Benjamin O'Brien, 82, who red in 1959 at the age of 80 as a Juan Fishing & Packing Co. em- ye after 52 years of service, died Seattle late in April.

He was in charge of building the npany's plant at Port San Juan in 8, and continued as its superin- dent until his retirement. His son, tram Jr., succeeded him.

ant "Pacific Trawler" sing on Humboldt

Believed to be the largest American wler fishing on the Pacific — the *ep Sea* is now a processing vessel does no fishing—*Pacific Trawler*, converted minesweeper—is now ng based on Humboldt Bay, Calif. skipper is Capt. Frank Davi of Francisco. He says the vessel has acity for 150,000 lbs. of bottom- .

She is rigged as a drum trawler, ding her net up to the cod end on ower-driven steel drum set at the rn rail.

B. C. Packers Promotes Brock and Van Snellenberg

Mac Brock has succeeded the late Neville Gerrard in charge of the packaged fish program of B. C. Packers, Ltd., according to announcement by Ken Fraser, vice president, production. He joined the company in 1943, served overseas during the war and returned to the company three years later.

Mr. Brock has worked in the fresh fish and fillet sales department and for two years was manager of the Clark's Harbor operation. Since 1955 he has been manager of the Edmunds & Walker operation in Vancouver.

Joe Van Snellenberg has also been promoted, and he is now manager of the Edmunds & Walker operation, responsible to Mr. Brock. He, too, has been with BCFP since 1943 and also served overseas during the war. He has acted in many capacities in the fresh fish operations both at Edmunds & Walker and Imperial plant, Steveston. He was also at the Clark's Harbor and Canco operations on the Atlantic coast. Since 1957 he has been superintendent of operations at Edmunds & Walker.

Crab Fishermen Purchase Sebastian's Astoria Plant

Columbia River cannery and cold storage of the Sebastian-Stuart Fish Co. at Astoria, Ore., was purchased in April by a group of five Columbia River crab fishermen, all making their headquarters at Warrenton, Ore.

They have formed Warrenton Crab, Inc., and expect to use the Sebastian-Stuart plant for packing and processing fresh crab taken by their boats.

Members of the group are: Cecil Green, president; Norman Vielmette, secretary-treasurer; Joe A. Nicholls, Wally Lebeck and Andrew Olson.

Purchase price of the property is reported as $15,000. The plant was built about 15 years ago as a combination tuna cannery and fillet freezer.

Only 16 inches from flange to flange but long on vital performance features

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Twin Disc engineers designed the MG-508 to save space, but they didn't short-change this compact customer in the features department. It has all the job-proven advantages of its "big brother" gears—the MG-512 and the MG-521. These include:

- Fingertip hydraulic control for smooth, instantaneous response
- Continuous oil-cooling of clutches to dissipate heat and prevent plate wear
- Exclusive dry Rubber Block Drive to compensate for misalignment
- Full horsepower in continuous forward or reverse operation
- Ability to service clutches without dismantling gear from engine
- Optional trolling valve

The MG-508 is furnished with ratios of 1.47:1, 2.04:1, 2.95:1 and 3.39:1. Optional driving rings permit replacement of older model Twin Disc gears—including the war surplus X8708—without flywheel modification. Furnished with SAE No. 1 or 2 housings.

TWIN DISC
Marine Gears

TWIN DISC CLUTCH COMPANY, Racine, Wisconsin

Alaska Board Avoids Heated Issues in 1961 Regulations

"Pink salmon nets" in an off-year for Pinks will be permissible on Bristol Bay this year, on decision of the Alaska Fish and Game Board, reached late in April at its Kodiak meeting.

The Nushagak and Naknek-Kvichak will be open for the 4¾" "Pink gear" after July 16, as originally scheduled, but the board did set the opening date for this gear at July 25 in the Egegik district and August 1 at Ugashik.

Salmon industry members generally sought to have the permission for "Pink gear" limited to Pink years on the contention that in the odd-numbered years it would take only small Sockeyes, usually females, and usually badly needed for spawning.

"Church Line" Will Stand

The controversial "Church line" at Port Moller, which generally separates the gillnets from the purse seines, stands unchanged. In the Aleutian area application of the Aleutian Development Co. for approval of setnets in the area was approved.

58-Foot Limit Is Tabled

The Board considered the Alaska House of Representatives recommendation that 58' overall be fixed as the maximum length for seiners in Southeast Alaska and Prince William Sound, but laid the matter over until further consideration.

Thus "Alaska limit" boats will continue legal throughout Alaska, regardless of overall length.

Resident Priority Passed Over

No action was taken with respect to application of the Alaska Resident Priority Bill, although a request that Nushagak be declared a critical area was filed by Denton Moore. The board is expected to consider the entire matter of application of the bill further at a later executive session.

Trolling is to be permitted in Prince William Sound waters throu out the year, except from July 1 September 30, when trolling will permitted only in "outer waters" the vicinity of Montague Island.

King crab regulations went changed in spite of several propos and with the exception of a mi shift designed to encourage explo tion of Alaska Peninsula waters.

Neville Gerrard, B. C. Fillet Manager, Dies

Neville E. Gerrard, 52, manager B. C. Packers' fresh fish plants (f division) in Vancouver, died Feb ary 26, following a heart attack.

Joining B. C. Packers in 1936, Gerrard was manager of the bra office near Campbell River until 19 when he became manager of the co pany's Prince Rupert operations. T years later he was appointed mana of the company's plant at Victo and held that position until going head office in 1956.

He was active in community serv and during his years at Prince Ru managed a symphony orchestra, w also taking part in the Boy Sc movement and Neighborhood Hou

BUILDING and MAINTENANCE

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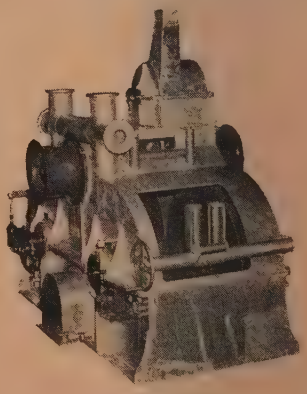

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Phenol-Like Odors in Fish Their Origin and Avoidance

G. IVOR JONES
thwest Branch
ional Canners Association

During the routine inspection of ned salmon by the Northwest nch as provided under the Better mon Control Plan, opportunity is orded our inspectors to determine odor of an exceedingly large num- of cans of salmon packed under ny diverse conditions. As would be ected, many different odors are en- ntered, most of which are readily ognized by their special character- cs or associations. For example, ne "off" odors are recognized as to contact with such materials as sel oil and other types of engine l. One that has been encountered ing past packing seasons and which caused particular concern is a enol-like odor. This odor is remin- ent of the commonly used lysol dis- ectant which contains a phenolic stance named cresol.

n order to explore the nature of phenol-like odor a project was dertaken to identify the substance sing it and to develop a chemical thod for its quantitative determina- n. It was also decided to investigate circumstances under which the salmon picked up the phenol- or sol-like odor. As a result of these dies a quantitative colorimetric thod was developed to detect phe- s and cresols. This method was ed on the blue color produced en cresols are reacted with a spe- colorimetric reagent. The blue to let colors produced by various ounts of cresols present in an alco- ic extract of the salmon in question re measured in a Beckman Quartz Spectrophotometer. It was found that the method was extremely sensitive in being able to detect one part of cresol in 20,000 parts of salmon.

Additional experiments demonstrated that raw salmon in contact with wood such as is present in fish holds and fish bins treated with a germicidal solution containing 1 part cresol in 30 parts water absorbed enough cresol to give a readily recognized phenol-like odor in the canned product. The cresol also could be readily detected chemically in these same samples. As a final test the cresol was determined chemically in samples of commercial packs of salmon which had phenol-like odors.

Cresol germicides are toxic materials and have no place in foods for human use. Because cresol has a powerful and unpleasant odor it actually is used in denaturing foods unsuitable for human consumption. For example, the regulation reported in the *Federal Register* for September 5, 1958 concerning the "Disposition of Incubator Reject Eggs" provides for the use of suitable denaturants, including cresols, which precludes the diversion of such reject eggs to human food channels.

Experience has proved that chlorine solutions are very efficient germicides and are suitable for use in the cleaning and sanitizing of fishing boats, tenders, and equipment at the canneries. It is recommended that a preliminary washing of the areas and surfaces requiring a thorough cleaning be done with an alkaline detergent solution containing sodium polyphosphate or equivalent effective soil remover. This preliminary washing should be followed by an adequate rinsing with clean water. All surfaces finally should be treated with a calcium or sodium hypochlorite solution or chlorinated water having a free chlorine residual of 10-20 parts per million. Directions for mixing and diluting hypochlorites to the desired strength are usually furnished with the product by the manufacturer.

California Imports of Frozen Tuna

Cumulative data in tons for 1961 through April 20, and for other years to nearest comparable date, as reported by USBCF Market News Service

	Albacore	Bluefin	Skipjack	Yellowfin	TOTAL
San Francisco	1,183	35	...	2,048	3,266
San Pedro	4,979	...	681	5,451	11,111
San Diego	722	...	18	232	972
Total 1961	**6,884**	**35**	**699**	**7,731**	**15,349**
Total 1960	9,753	86	2,296	10,298	22,433
Total 1959	6,715	...	2,541	17,138	26,394

So. Calif. Domestic Tuna Deliveries

Cumulative 1961 totals through April 20, in tons as reported by U. S. Market News Service

	Albacore	Bluefin	Skipjack	Yellowfin	Bonito, etc.	Total
Hook and Line	...	...	875	4,820	...	5,695
Purse Seine	...	...	324	39,375	1,010	40,709
Total 1961	...	...	**1,199**	**44,195**	**1,010**	**46,404**
Total 1960	...	110	7,989	31,724	17	39,840
Total 1959	...	1,225	14,570	24,328	113	40,236

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Five MUSTS for Management

Of Salmon to Achieve Sustained Yield

● Research required for success in salmon resource management to provide the maximum sustainable yield was reduced to five points by Dr. William F. Royce, director of the Fisheries Research Institute of the University of Washington, speaking before the Association of Pacific Fisheries at Ojai, Calif., in November.

The five points, he said, were based on the experience of the International Pacific Salmon Fisheries Commission director and staff in managing the Fraser River salmon fisheries with the objective of maximum sustainable yield.

Dr. Royce outlines the five requisites clearly in these words:

1. *Recognition and definition of each major race of salmon.* There are about 2,000 salmon streams in Alaska (500 in the rest of the United States) which receive significant numbers of spawning salmon. In each of these streams more than one species of salmon may occur and in many three to five species do occur. Further, in many streams more than one run of the principal species, e.g., pink salmon, now occurs. Therefore, we have something like 10,000 units of spawning salmon, for each of which there must be a division of catch and escapement. This division can be achieved in a practical way only by combining and defining major races. A major race may be a run of Red salmon to a large river or a combination of several runs into one bay at about the same time. The objective must be to define races each of which includes the smallest possible number of spawning units.

2. *Accurate catch and escapement statistics on each major race.* Good overall catch statistics are being obtained but, except for a few, major salmon runs are not broken down into individual races. Complete escapement statistics are obtained on some major red salmon runs but in most areas escapements are measured as indices obtained from aerial surveys. Escapement statistics are usually indices (aerial surveys) and few of these can be related to the catch of the same race.

3. *An accurate forecast of the return of each major race.* Large runs must be cropped and may require large facilities to be readied beforehand. Small runs must be saved from heavy fishing which in many areas can nearly exterminate them before seasonal regulations can be imposed.

4. *Knowledge of the number of spawners needed on the spawning grounds of each major race.* Every salmon spawning ground and rearing are has an optimum number of salmo which may spawn and grow most su cessfully. This optimum number ma vary markedly according to climati conditions (over which we have n control) and it may also be a functio of preceding escapements. Exceedin it may be necessary in the preliminar stages of management, because o understanding of the effects of envi onment on salmon abundance is n yet complete. Learning the optimu number for each major salmon race i Alaska is a major problem for a salmon research.

5. *Knowledge of how much ge and time is needed to catch the desire number of salmon.* This requires know ing the timing and route followed b each major race and the catching ra of each kind of gear. It must be ob tained by tagging and by critical analy sis of catch-and-effort statistics.

"Cape Douglas" Insuranc Is Denied to Creditors

Court action seeking to recover in surance on the scuttled purse seine *Cape Douglas* for benefit of mortgag holder and creditors was rejected b a Federal court jury in Seattle th middle of March.

Suit was brought by J. A. Gree Everett banker and former owner o the vessel, who held a $49,000 mor gage on the vessel; and for other cred itors. The action was resisted by group of insurance companies wh spent some $35,000 to $50,000 raisin the 78' vessel from deep water.

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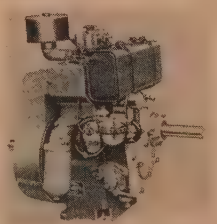

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960 Prices and Costs Haunting anadian Salmon Canners in 1961

ow can the British Columbia sal- industry rationalize the higher es resulting from last year's high- small pack with the more pro- ng prospect for supplies this year? his was one of the problems facing ators as a new season approached. kers repeatedly reported that, so as the export business was con- ed, customers were impatient with ng up to four shillings six pence cents) for a half-pound can; that were buying Japanese salmon in- l, or doing without.

ecognizing the importance of hold- prices to a minimum, packers e unable however to see much e of reducing costs materially. n a Japanese carryover reported 280,000 cases of Sockeye being red in the United Kingdom at 15 fob. Japan, compared with year's B.C. prices ranging as high $25 a case, it was obvious that marketers of B.C. canned Sockeye ld be facing anything but a simple gnment this year.

ommenting on the canned salmon pects, the Fisheries Association of . states:

The record high prices for canned ion which were a direct result of high costs and small production 960 have slowed consumption in Canadian market as well as over- . The small pack of 1960 plus carryover from 1959 has proved icient to supply the reduced de- d which accompanied the higher es.

A feature of the current market is the greatly reduced volume ales to the United Kingdom. At end of February in the current market year these sales are down 60% from last year at the same date. This reflects, of course, our reduced supply situation in B.C., but it also reflects a greatly reduced demand in the United Kingdom. U.K. distributive outlets are now very heavily stocked with canned salmon, particularly Japanese, and the rate of consumption has declined."

Dressel Visits U.K.

Lawrence Dressel, head of Dressel-Collins Fish Co., Puget Sound salmon canners, returned to Seattle in mid-March just in time for the 23rd annual Salmon Cutting, after a business trip to Great Britain.

While in London he had opportunity of visiting, among others, C. H. Benmore, managing director of Henry W. Peabody & Co., with whom his firm has enjoyed business through Jay Gavin of Gavin Bros., Seattle, Pacific Northwest representative of the famous Peabody firm.

Tuna Standards Stand—

FDA Overrules Label Objections

● Tuna standards of identity will stand unchanged.

Tuna which is dark in fact will need to be designated "Dark" on the label.

Tuna which is packed in water must be so labelled that the words "In Water" are a part of the name of the product, rather than merely showing water among the ingredients.

This, in brief, is the decision of the U. S. Food and Drug Administration as result of extended study of objections filed against two aspects of the Standards of Identity for Canned Tuna included in the standards for that product adopted in 1957.

Application of the labelling requirements were suspended for four years during the investigation of the grounds for the objections.

● "Dark" tuna designation for canned tuna with a Munsell value above 5.3 was objected to by a Maine canner.

FDA research showed that Little Tunny, a small Atlantic form of the fish, and Bluefin above 104 lbs. weight generally would need to be labelled "Dark"; but that Bluefin under 104 lbs. would qualify as "lightmeat."

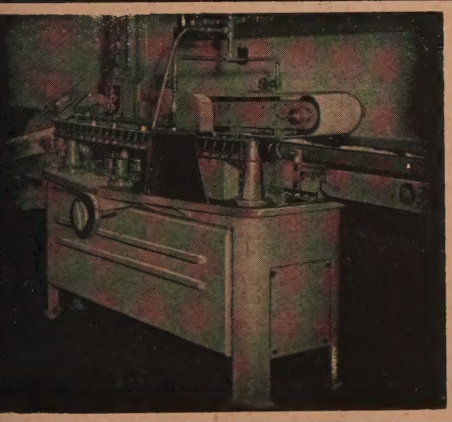
Thus it turned down the Maine canner, who appears to have been in the habit of labelling some of his product "Dark" anyway.

● "In Water" was objected to by distributors of brine-packed tuna of Japan origin, who argued that making the words "in water" a part of the *name*, instead of including water in the ingredients, would lead the consumer to believe there would be less tuna and more water in the can.

Consumer research showed that buyers *wanted* to know whether the tuna was packed in water or in oil; that some *wanted* tuna in water, and would be helped in finding it by the new label requirement.

So this objection was turned down also.

The standards stand.



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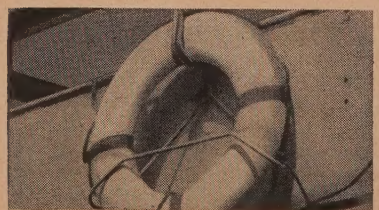

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One user of BFG Spongex floats, Captain Don Hansen of the salmon seiner "Mystery Maid", Seattle, summed it up like this, ". . . they withstand the abuse they get when the seine is set at full speed and when they pass through the power block in hauling the net. Spongex floats...give a lot of floating power."

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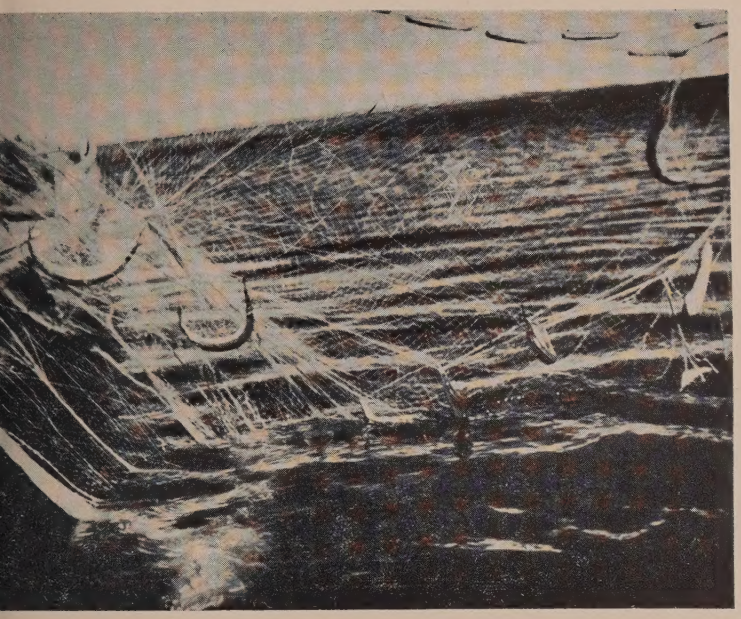

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U.S. Food & Drug Administration Announcement

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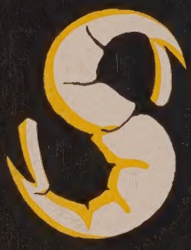

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